

# **Duke Statistical Science TA Manual**

2024-08-19

# Table of contents

<b>1</b>	<b>Introduction</b>	<b>4</b>
	Purpose . . . . .	4
	The “ABC” of TAing . . . . .	4
<b>2</b>	<b>Useful links</b>	<b>6</b>
<b>3</b>	<b>Responsibilities</b>	<b>7</b>
<b>4</b>	<b>Best practices</b>	<b>11</b>
	4.1 Before Classes Begin . . . . .	11
	4.2 Professionalism . . . . .	12
	4.3 Labs . . . . .	13
	4.4 Office Hours . . . . .	14
	4.5 Grading . . . . .	15
<b>5</b>	<b>Policies</b>	<b>17</b>
	5.1 Academic Misconduct . . . . .	17
	5.1.1 Teamwork/collaboration . . . . .	17
	5.2 Students with disabilities . . . . .	18
	5.3 Diversity and inclusiveness . . . . .	18
	5.4 Harassment . . . . .	19
	5.5 Relationships with students . . . . .	19
	5.6 Emergency conditions . . . . .	20
<b>6</b>	<b>Resources</b>	<b>21</b>
	6.1 Learning resources . . . . .	21
	6.2 Mental health and wellness . . . . .	21
<b>7</b>	<b>Training</b>	<b>23</b>
	7.1 Training . . . . .	23
	7.2 First-time TAs . . . . .	23
	7.3 Further Training . . . . .	24
	7.3.1 Certificate in College Teaching . . . . .	24
	7.3.2 BASS Instructional Fellowships . . . . .	24
	7.3.3 College Teaching Workshops . . . . .	25

<b>8</b>	<b>Head TAs</b>	<b>26</b>
8.1	Which classes should have Head TAs? . . . . .	26
8.2	Training . . . . .	26
8.3	Responsibilities . . . . .	27
8.3.1	Administrative tasks . . . . .	27
8.3.2	Pedagogical tasks . . . . .	29
8.4	Role of the instructor . . . . .	30
<b>9</b>	<b>Evaluation and recognition</b>	<b>31</b>
9.1	Evaluation . . . . .	31
9.2	Recognition . . . . .	31
<b>10</b>	<b>People</b>	<b>32</b>

# 1 Introduction

## Purpose

As a Teaching Assistant (TA), whatever your duties, you are part of the Statistical Science Instruction Team. In Fall 2024, we have filled over 1,400 seats in courses taught by departmental faculty to students who came to Duke from across the planet. Students will range from almost 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 students in our Statistical Science majors, minor, interdisciplinary majors, Master's, and Ph.D. programs, 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 “ABC” of TAing

Always **B**e **C**ommunitcating!

- Talk with and listen to your students in class, in office hours, on discussion forums.
- Talk with your instructor if you have questions, concerns, or suggestions. And listen to your instructors' requests, tips, and suggestions. And read their emails/messages! It's not uncommon for first-year graduate TAs to have learned statistics from a different perspective than our undergraduate courses or with different software. It's also possible that undergraduate students who have taken the course they're assigned to teach have learned it from a slightly different perspective or with different policies and processes.
- Talk with the other TAs. And listen to them when they're sharing tips and best practices.
- Talk with the DUS, the Undergraduate Coordinator, and the departmental staff. And listen to them when they're sharing policies, requirements, tips, and best practices. And read their emails/messages!
- Ask for clarification and ask for help when you need it.

- Let other TAs, your instructor, the DUS, and the Undergraduate Coordinator know what you need 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

- Fall 2024 Academic Calendar: <https://registrar.duke.edu/2024-2025-academic-calendar/#fall2024>
- Final Exam Schedule: <https://registrar.duke.edu/student-resources/exam-schedules/>
- Duke COVID updates and policies: <https://coronavirus.duke.edu>
- Fall 2024 Office hours: Link is provided in TA training site in Canvas
- Duke Undergraduate Instruction Bulletin: <https://undergraduate.bulletins.duke.edu/>
- The Graduate School Bulletin: <https://graduateschool.bulletins.duke.edu/>
- Questions or concerns: [dus@stat.duke.edu](mailto:dus@stat.duke.edu)

## 3 Responsibilities

Depending on your level (undergraduate, MS, or PhD student), the number of hours you're expected to work as a TA varies:

- Undergraduate TAs are expected to work 8-10 hours per week, on average.
- MS TAs are expected to work 12-15 hours per week, on average.<sup>1</sup>
- PhD students have a variety of assignments:
  - Full TAs are expected to work 12-15 hours, on average.
  - Half TAs or RA/TAs are expected to work 6-7.5 hours per week, on average.
  - RA+s are expected to work 4-5 hours per week, on average.

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

- Complete all training and learn the tools and technologies required for the course you are assisting.
- Read and respond to all communication from the department, your instructor, other campus employers, and the university within 24 hours or before the end of the next business day, whichever is sooner.
- Complete your profile in Canvas with a photo, phonetic name spelling, and other requested information in your TA Training site and TA course site.
- Familiarize yourself with the university curricula and policies, including policies and procedures for religious holidays, disability accommodations, class attendance, credits, exams and grading, harassment, plagiarism, etc.:
  - Undergraduate courses:

---

<sup>1</sup>Unlike PhD TAs, we don't generally have part-time MS TAs since the funding structure for these two types of students is different. However, sometimes, we might need a specific MS TA for a particular MS course and might be able to negotiate a part-time offer for them upon their request. In these rare cases, being a 50% MS TA is possible, amounting to 6-7.5 hours per week.

- \* Undergraduate bulletin, including T-Reqs (Trinity Requirements): <https://undergraduate.bulletins.duke.edu>
- \* Trinity College Academic Policies and Procedures: <https://trinity.duke.edu/undergraduate/academic-policies>
- Graduate courses:
  - \* Graduate Bulletin: <https://graduateschool.bulletins.duke.edu>
  - \* Graduate School Academic Policies and Procedures: <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.
- Attend regular meetings with the instructor, typically at least once a week.
- Office hours:
  - Office hours can be in person or remote. We strongly recommend that all courses set up at least some Zoom office hours to accommodate students who are ill in isolation or stuck traveling. Check with your course instructor for the ideal distribution of Zoom / in-person office hours.

In general, TAs working 8-15 hours per week should have two office hours each week, and those working less should have one hour. However, your instructor may prefer a different distribution of responsibilities among their TAs.

- Your primary duty during office hours is to help students from your course.
- Lectures: We strongly recommend all TAs attend the first lecture of the semester and discuss with the instructor whether continued attendance is required. For TAs new to a course or new to the TA role, attendance throughout the semester is a great way to stay connected and up-to-date with the course. Ultimately, though, your instructor will decide whether lecture attendance is required. Some or all TAs assigned to a course might be tasked with helping with active learning exercises during lectures.
- 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, running the code, and providing feedback to the instructor if anything is incorrect or unclear.



- Meet with your instructor and ensure you understand what is expected of you for that role in that course.
- In general, lab leaders should plan to spend the first 5-15 minutes of the lab session introducing the lab and setting the stage for the exercises students will work through during the session. For the remainder of the lab session, TAs are expected to walk around, answer questions, facilitate teamwork, etc.
- If you are assigned the duties of a Head TA, see the [section on Head TAs](#).
- 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 ask questions. If the instructor is using Ed Discussions or another tool for Q&A, discuss with the instructor expectations about answers and how to get students to ask questions in that tool rather than in emails. You may be asked to cover answering questions on particular days.
- Monitoring performance / keeping the pulse of students' learning:
  - Assist in assessing and reporting student performance to the instructor. This includes identifying top and struggling students and identifying problems or concepts causing difficulty for students. Your attention to student learning and your communication are crucial!
  - Let the instructor, the Director of Undergraduate Studies, and/or 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, run, or assist in labs.
  - Conduct review sessions before exams if the instructor requests them.
  - Help maintain the course website or Canvas 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.
  - **Fall 2024 final exams end at 10 pm on Monday, December 16.** Grades are due within 48 hours of the end of the exam period. This means TAs are expected to continue holding office hours during their final exam periods and be available to grade 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:
  - TAs are each issued an individual offer letter that spells out the terms and conditions, expected hours, and compensation for their service as a TA. Read the offer letter, ask any questions, and if there are no further questions, sign it and return it to the sender.
  - Keep accurate track of time spent on the course and report to the instructor if your hours are consistently above or below the expected levels.
  - Never exceed a total of 19.9 compensated hours per week across all campus duties.
  - Inform the Business Manager right away if you have a Work Study Allocation that you plan to use in our department.

If you are paid biweekly, update and save your time card when you finish work for the day and submit it promptly before the deadline. If you do not turn in your time card, you will not get paid for the hours you worked. Our Business Manager may send you a reminder or ask you questions about your time card, but it is ultimately your responsibility to turn in your hours.

- Illness:
  - If you become ill or have an emergency and cannot perform your assigned duties, please see to your immediate needs (<https://studentaffairs.duke.edu/studenthealth>). Then, let the instructor and the Undergraduate Coordinator know as soon as possible. Follow the guidelines found at <https://coronavirus.duke.edu>.
  - If the instructor stops showing up, contact the DUS right away.
  - If another TA or a student stops showing up, contact the instructor immediately.
- Always complete the course and TA evaluations in the classes you are enrolled in.

## 4 Best practices

### 4.1 Before Classes Begin

- **Technology:** During training, you will be asked about your ability to use Gradescope for grading and Zoom for online office. For whiteboarding during online office hours, you can turn your cell phone into a document camera by aiming it at a paper or whiteboard. If your computer or laptop fails, please get in touch with the instructor immediately. If needed, the department has some emergency loaners so you can continue to succeed in the interim.
- **Books:** You should never have to purchase a textbook for a course you're TAing. Many courses now have electronic versions of the text available for free online or through the Duke Libraries. Additionally, the DUS Assistant, has copies of textbooks you can borrow for the duration of your TAship. Make sure to return the book at the end of the semester.
- **Canvas:** Canvas is a university-wide course development and presentation platform known as a Learning Management System (LMS).<sup>1</sup> You can access Canvas with your Net ID at <https://canvas.duke.edu>; however, your course faculty must manually add you to their course. Canvas 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. Note that undergraduate TAs are not supposed to have access to the entire gradebook in Canvas; however, you may be able to do anonymous grading. Canvas also offers features for sending emails to individuals or groups, hosting online discussions, collecting homework assignments, and posting and viewing grades. Canvas may also be used to organize Zoom meetings for office hours.

For an overview of capabilities and various tutorials, go to <https://go.canvas.duke.edu/training-materials/introduction-canvas/>. Duke Learning Innovation and Lifetime Education (LILE) also periodically offers Canvas training. Your required TA training may also include Canvas training. For any questions about Canvas, consult your course faculty or the Undergraduate Coordinator. Learning Innovation also offers training on Canvas.

- **Course website:** Many courses have public course websites that contain / link to course materials. Familiarize yourself with the course website.

---

<sup>1</sup>Canvas replaced Sakai in 2024. All courses use Canvas, at a minimum, for grades.

- **Discussion and communication tools:** Ed Discussions is a common choice for an online discussion tool, as it's built into Canvas. Some faculty members may use tools not built into Canvas, such as Piazza or Slack. Once your instructor has chosen a discussion tool, ensure you're familiar with it or ask for training on the tool from your instructor or the Undergraduate Coordinator. Note that some courses use different communication tools to teach team communication and communication with students. Note that some faculty might choose not to use an online discussion tool.
- **Gradescope:** Gradescope is an online grading tool that can be integrated with Canvas. Gradescope is used extensively in the department, and all TAs will be trained in its use. If your instructor is using it, and you haven't used it before, ask questions / ask for training to understand how best to complete your grading duties fully. You can access Gradescope through Canvas or directly by logging in with your Net ID. Discuss with your instructor if you have previously used Gradescope for grading and think it would assist your course duties this semester. If you or the instructor would like help with Gradescope, ask the Undergraduate Coordinator for course-specific training.
- **Copies:** If your instructor asks you to make physical copies for the course, please email the DUS Assistant and cc the Undergraduate Coordinator for access and instructions.
- **Supplies:** Please inform your instructor of any unmet supply needs, such as chalk, dry-erase markers, red pens, etc., for instructional and grading purposes. If these items are missing in a TA office hours space, please let the DUS Assistant and the Undergraduate Coordinator know.
- **Computing labs:** All 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. Graduate and experienced undergraduate TAs usually supervise the computing lab sections. In larger courses, undergraduate TAs might also be assigned as lab helpers. If you're new to your courses' computing environment, you should ask for help from the instructor and the Undergraduate Coordinator.

## 4.2 Professionalism

Whether you are attending class with the instructor, leading a lab, or holding office hours online, remember that you are a leader of students and representing the department. Students may attend online sessions in pajamas, wrapped in blankets, and attending from their beds, but the TA shouldn't. If students show up inappropriately dressed, please discuss the issue with the instructor.

- For online office hours:

- Use an appropriate virtual background if your computer can handle it. Try to be in a dull environment, not a distracting one. A bookcase, office space, living room, or yard are fine backgrounds. Be sure to have adequate lighting. Sometimes, it is just a matter of facing a different direction. There is no need to buy a ring light, but many YouTube videos show you how to set up a suitable environment for leading an online session.
- If your environment is noisy, use a headset and mute yourself when you are not speaking. Practice where you know you will be so that someone can listen to you and ensure the sound is adequate.
- If you need help with your online setup, please get in touch with the Undergraduate Coordinator.

## 4.3 Labs

- Meet with the 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 discuss upcoming labs and any issues that arise.
- During the first day of lab, do what you can to set the course climate and develop a rapport with the class. Get students to interact with you and their classmates either through introductions, small group discussions, 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 essential and what your expectations will be. After the first class, you will want to leave knowing the students' expectations and knowing they are engaged enough to begin expending the time and energy needed to do well in the course.
- Ensure you have worked through the lab beforehand, leaving ample time to ask the instructor and Head TA 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 the lab, engage the students. Please encourage them to explore and play rather than go through the motions. Ask them questions. Be receptive to their questions. Help them link the computing lab to what has been covered in the text and lectures.

- Please avoid “*didactic dictation*”. One of the most frustrating experiences for a new coder 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 should be done slowly, where you demonstrate something as you talk about it, and students code along. You don't have to be perfect. It's okay to make mistakes and correct them, modeling authentic coding for your students. If you make a mistake or get an error,

model the process of troubleshooting by talking through finding the issue and making corrections. Demonstrate first, and then have students work on their code. Watch for frustration. Address it positively. Suggestions for how to do this incredibly well can be found [here](#).

- Wander around the classroom and check in with students (or teams of students) even when there are no questions. If there are many questions, establish a procedure you will use to answer them fairly and in some order. Students are more likely to reach out and ask a question if you're physically closer to them than if you're sitting in front of the classroom. Don't just ask "Any questions?" Instead, ask, "What questions do you have for me?" or say, "I'll take three questions now," which are better ways to solicit inquiry.
- If you have suggestions for improving the lab materials or find errors in the lab instructions, discuss them with your instructor. Be sure you understand how corrections will be made for later lab sections when an early lab TA discovers a needed correction.

## 4.4 Office Hours

**TO DO: First, add some language about in-person office hours, then add a bullet point about online hours.**

- Many instructors will set up Zoom office hours rooms via Canvas. Practices may differ between instructors, but it is a good idea to set up a Google sheet that stays linked in Canvas and can be used for students to indicate their questions or needs during the session if online. This will help you manage the crowd that could show up. You will find an example of this in the TA training site in Canvas.
- Make sure you have read the text and class notes. Use the same notation, definitions, and perspectives as the text's author and the class's instructor.
- 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. Learn their names, and offer yours.
- Avoid solving homework problems for students. Giving students the answer does not help them develop the problem-solving skills necessary for them to do well in the course. Ask guiding, probing questions, but get the student to think. Offer similar problems as examples to work through together. Your students should expect to have their questions answered, but they should not expect you to give them the answers to the homework questions. Never tell students their work is correct; this will lead to problems if you are wrong.

- 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 student's level. If a student is in trouble beyond your abilities, refer them to the instructor.
- Make sure to speak clearly, slowly, and audibly in person or online. Do not assume your students know a particular theorem or distribution if it has not been used in the course. Speak respectfully and let them know the course is meant to be challenging, but success happens with practice and sufficient time spent 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 more significant 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 on the TA training site.
- Let the instructor know if you have students struggling with the material or not knowing 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. Contact Duke Reach at <https://students.duke.edu/wellness/dukereach/> if you suspect they need help, and let the instructor know. But mostly, be kind. You were a beginner once, and the student 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.

## 4.5 Grading

- Before you begin to grade, go through solutions and double-check answers, points breakdown, etc.
- This is important – make sure that you understand the solutions. You should not start grading if you don't feel 100% confident that you can solve the problem (even after seeing the answer key). Instead, please review the content and discuss it with the instructor or other course TAs.
- Grade like a human, not a machine. Use your judgment, and check in with the instructor or the Head TA if you're unsure if a student's solution is good enough, even if it doesn't exactly match the key. Note that being able to do this appropriately and fairly requires that you have mastered the course content.
- Understand the policies for partial credit, late assignments, etc., and apply them consistently.
- Find out from the instructor whether they expect you to make the solution key or grading rubric, including answers and a breakdown of how points will be distributed. Ask the instructor to review it before it goes live.

- 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, mainly if you use Gradescope.
- If you are sharing grading duties, 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 per the instructor's instructions, and 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 within Gradescope or in Canvas.
- Finish all grading within one week of receiving the grading assignment unless otherwise instructed by your instructor. If an emergency or illness will prevent timely grading completion, inform the instructor as soon as possible.



# 5 Policies

## 5.1 Academic Misconduct

It's crucial to let the course instructor know if you suspect or receive reports of academic misconduct so that we may handle all cases of dishonesty according to University Policy. You must report your suspicions to the instructor, and they will investigate. Do not interrogate the students. This typically requires that the instructor report offenses to the Office of Judicial Affairs, which will advise on mediation, arbitration, informal resolution, or disciplinary action. The Duke Standard is as follows:

Duke University is a community dedicated to scholarship, leadership, and service and the principles of honesty, fairness, respect, and accountability. Citizens of this community commit to reflect upon and uphold these principles in all academic and non-academic endeavors and to protect and promote a culture of integrity.

To uphold the Duke Community Standard:

- I will not lie, cheat, or steal in my academic endeavors;
- I will conduct myself honorably in all my endeavors; and
- I will act if the Standard is compromised.

Faculty and TAs are encouraged to be proactive in preventing dishonesty. For online exams, randomization and unique problems can help. Some time-limiting techniques are helpful, but students with accommodations must also be helped. Hundreds of companies are willing to sell students answers to problem sets, quizzes, and exams; using these services is likely to violate the Duke Community Standard. AI/ML tools now might be used to generate code or other work; instructors may have a policy about this in their syllabi. If you suspect usage violates the instructor's course policies, talk with the instructor.

### 5.1.1 Teamwork/collaboration

If your course allows teamwork for homework or labs, ask the instructor to speak with your students about the appropriate collaboration type. For instance, if students can work together on HW problems, discussion is relevant, but students must write up individual responses for every question. Student answers should not be the same as their collaborators'. If there is

an in-class group assignment for which one submission is expected, ensure the submission instructions are clear and followed by the groups. Our students come from all over the world, from all kinds of prior learning experiences, and their previous experience with graded teamwork can be highly varied. Please help your students understand the nuances of permissible collaboration and teamwork.

## 5.2 Students with disabilities

Students with disabilities have rights and responsibilities, which may be found here <https://access.duke.edu/students/rights-responsibilities>. The procedures for accessing accommodations or support are documented at <https://access.duke.edu/requests>. In some classes, one TA (likely the head TA) will be asked to manage accommodations for the course. In larger classes, multiple TAs may be involved. If your instructor asks for assistance in providing accommodations for a student, ensure all information regarding a student's disability or accommodations is kept confidential. Do not discuss it with other TAs or in front of other students. Questions should be directed to the instructor only. If a student approaches you about accommodations, ask them to communicate with the instructor and let the instructor know you have referred them. Discuss it with the instructor if you are leading a lab and a student asks for lab accommodations.

Duke also has a Testing Center available to students who need accommodations. If instructors choose to use the Testing Center, the decision should be stated in the class syllabus. Students who qualify to use it include students granted testing accommodations by the SDAO and students who need to complete make-up exams due to an approved absence. Direct all questions from students about the testing center to the instructor or direct the students to <https://testingcenter.duke.edu>.

If you develop physical access challenges to any assigned space at Duke, contact the Duke Disability Management System (<https://access.duke.edu>), the course instructor, and the Undergraduate Coordinator for assistance.

## 5.3 Diversity and inclusiveness

Students from all diverse backgrounds and perspectives need to be well-served by our courses, their learning needs to be addressed both in and out of class, and the diversity that the students bring to this class needs to be viewed as a resource, strength, and benefit. Therefore, the materials and activities you present must respect diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Our department's statement is here: <https://stat.duke.edu/diversity-equity-and-inclusion>.

If you have suggestions for improving the effectiveness of the course for you personally or for other students or student groups, let the course instructor or the DUS know.

Furthermore, you should strive to create a learning environment for our students that supports a diversity of thoughts, perspectives, and experiences and that honors students' identities (including gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture). To help accomplish this, encourage your students to

- let you know if they have a name and set of pronouns that differ from those that appear in the Duke records,
- reach out if you feel like their performance in the class is being impacted by their experiences outside of class, and remind them that if they prefer to speak with someone outside of the course, their academic dean/director is an excellent resource and
- talk to you if something was said in class (by anyone) that made them feel uncomfortable.

Requiring people to identify their pronouns is not helpful; invite it, but don't force it. If you want to give your pronouns, do so. Review the pronoun resources at <https://students.duke.edu/belonging/icr/csgd/pronouns>.

Please let the instructor know if you notice a disrespectful issue in class or during office hours.

## 5.4 Harassment

Harassment complaints that involve both undergraduate students and graduate students, faculty members, or employees are addressed, as necessary, through the intervention of the Office of Institutional Equity (<https://oie.duke.edu>) or the official responsible for the respondent's supervision. Such situations are of particular concern because the possible inherent power differential between the parties increases the potential for coerciveness. See <http://www.duke.edu/web/equity/harassment.html> for more information on Duke's harassment policy. If you have any concerns regarding harassment, reach out to the course instructor or the DUS.

## 5.5 Relationships with students

Consensual romantic or sexual relationships between any student charged with academic instruction and students receiving such instruction are prohibited. This applies to teaching assistants, research assistants, tutors, graders, and any other students who provide academic instruction to any other student. A TA could lose the opportunity to continue in the instruction role, and such behavior could also violate student conduct policies. This is covered in more detail in Appendix L to the Faculty Handbook (<https://policies.provost.duke.edu/docs/faculty-handbook-appendix-l-faculty-student-relationships>).

If you are already in a relationship with a student in the class you are TAing, please inform the course instructor and the DUS so that your TA assignment can be changed to another course.

## **5.6 Emergency conditions**

Download and install the Live Safe app (<https://prepare.duke.edu/programs/livesafe>) to receive emergency notifications for Duke's campuses. You can also obtain information on emergency notifications and procedures at <https://emergency.duke.edu>. Please familiarize yourself with this site and its contents.

Our academic calendar sometimes brings with it the threat of severe weather in North Carolina. At the start of your course, locate the nearest tornado-safe zone in your assigned location or wherever you are staying. If you are in Old Chem, the nearest tornado-safe area is in the library buildings next door. If you can't find signage in other buildings, ask the building staff for their tornado-safe location. If there is a tornado watch, monitor conditions. If a tornado warning is announced, you will be notified to take shelter in the nearest tornado-safe area.

If you have an emergency requiring transportation, call 911. For non-emergencies, call campus police at (919) 684-2444.

## 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).

### 6.1 Learning resources

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

### 6.2 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 the course instructor's attention. In addition, familiarize yourself with mental health and wellness resources:

- **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: <https://students.duke.edu/wellness/dukereach>.
- **Counseling and Psychological Services (CAPS):** (919) 660-1000. CAPS services include individual and group counseling services, psychiatric services, and workshops. CAPS also provides referrals to off-campus resources for specialized care: <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://timelycare.com/bluedevils>.
- **DukeLine:** Students who want to anonymously connect with a Peer Coach can text 984-230-4888 from 5-11 pm daily. DukeLine offers in-the-moment anonymous, non-emergency text support from a peer: <https://sites.duke.edu/dukeline>.

- **DuWell:** (919) 681-8421. DuWell provides Moments of Mindfulness (stress management and resilience building) and meditation programming (Koru workshop) to assist students in developing a daily emotional well-being practice. All are welcome, and no experience is necessary: <https://students.duke.edu/wellness/duwell>.

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 the 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.

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

## 7.1 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 and other requirements each semester. In Fall 2024, we are not requiring a technology check for Zoom-readiness but that training will be provided upon request (reach out to the Undergraduate Coordinator with your request). We expect that you will get training on other technologies as they pertain to your course (Gradescope, Canvas, 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 c and we'll make sure this training happens promptly.

You have been assigned to STATSCI TA Fa24, the departmental training Canvas site for TAs, as the main TA training site. Training may be added as needed as the semester proceeds and we'll inform you with a Canvas announcement from there. There is required training on TA duties, on preventing harassment, on other topics as required by the University, and on the learning technologies needed in your course.

## 7.2 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 the Undergraduate Coordinator or any others involved with course management. You will train 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. You can also request a lab observation after a few weeks, for suggestions and feedback. Lab observations of all TAs leading labs or discussion sections will be offered in Weeks 3 - 5. Your instructor or the Undergraduate Coordinator may do this observation.

## 7.3 Further Training

Learning Innovation & Lifetime Education (LILE) offers workshops and other training opportunities. Upcoming LILE workshops can be found at <https://lile.duke.edu/events>.

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

### 7.3.1 Certificate in College Teaching

The [Certificate in College Teaching](#) program prepares doctoral students to teach 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 helps you develop as a teacher and 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)
- 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 review 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. You may complete the Triad teaching observation requirement during any semester you are TAing or teaching.

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

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

### 7.3.2 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 and a scholarship covering full or partial tuition and fees for their semester of participation. This effectively “buys out” that much of any 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 terms of the other fellowship prohibit this arrangement).

### **7.3.3 College Teaching Workshops**

[College Teaching Workshops](#) are 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.

# 8 Head TAs

## 8.1 Which classes should have Head TAs?

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

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

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

## 8.2 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 be during the first week of classes.
- Attend the Head TA check-in with your instructor during weeks 3 and 6. The check-in will include
  - Training on giving quality feedback
  - Training on reviewing feedback from other TAs efficiently and effectively
  - Sharing experiences with course logistics, setup, and Gradescope.
  - Check in on workload
  - General Q&A
- Provide feedback through an end-of-semester reflection.

## 8.3 Responsibilities

### 8.3.1 Administrative tasks

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

#### 8.3.1.1 Office hours

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

#### 8.3.1.2 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 them to assigned tasks.
- Check in with other TAs about the hours they work weekly; adjust grading assignments, as needed, to help keep their hours consistent and within their limits. If the workload cannot be allocated fairly and people remain within their limits, notify the instructor.

#### 8.3.1.3 Gradescope

- Work with the instructor at the beginning of the semester to ensure 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 Canvas and make the links for synchronization through the Modules tool in Canvas.
  - Ensure grading rubrics are set up using the instructor's preferred grading convention (positive scoring, negative scoring, or a combination of both). Include any other rubric items requested by the instructor, such as a "needs review" rubric item.

#### 8.3.1.4 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 the total hours allowed and other TA responsibilities (e.g., labs, office hours, classroom). The instructor will provide the total hours and responsibilities.
- Set up a clear communication line so TAs may ask questions about grading assignments
- Make sure all TAs complete grading (lab and lecture) within a week (or less during summer). This includes
  - Keep track of progress and gently remind TAs when the grading deadline is approaching.
  - Send personal reminders to TAs with 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, remind the TA. If you cannot contact the TA or grading is still not completed within the agreed-upon time frame, notify the instructor immediately to follow up with TAs not finishing their grading.
- When the grading deadline has passed, do a first pass on graded items marked “needs review” by other TAs. Then, 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 mainly 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. Notify the instructor if any others need instructor feedback before finalizing.

#### 8.3.1.5 Additional tasks

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

## 8.3.2 Pedagogical tasks

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

### 8.3.2.1 Peer evaluations

- Schedule peer evaluations in [Teammates](#) or software preferred by the instructor. The instructor will provide the dates of the peer evaluation. Note that Canvas also has peer evaluation tools for grading; you may wish to test it.
- 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!

### 8.3.2.2 Assignments & grading rubric

- Review assignment instructions and notify the instructor of anything 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 the 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.*

## 8.4 Role of the instructor

The following are the instructor's roles and responsibilities, which 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 assignments or assessments.
- In assigning responsibilities to the Head TA, the instructor should determine who will set up assignments in Gradescope and Canvas and make the links for synchronization through the Modules tool in Canvas.
- Make arrangements for student accommodation requests and coordinate with the testing center if needed.
- Scheduling weekly meetings with all TAs to discuss course flow, ensure all TAs have a good handle on the topics/concepts/tools coming up in the subsequent week, etc, and discuss ongoing grading. Unless there is a particular reason, do not decrease this cadence.
- Managing the Canvas Gradebook. The instructor may not grant teaching assistants (including the Head TA) access to the full Canvas gradebook unless there is a specific reason. Note that the university prohibits undergraduate TAs from accessing the Canvas Gradebook entirely.
- Check in with the Head TA during Weeks 3 and 6 about workload. If there are concerns about 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

### 9.1 Evaluation

The opportunity to hold a TAship will continue contingent on good TA performance. Student and faculty evaluations of TAs will occur via surveys at the end of each semester. Excellent TA evaluations can also provide the basis for future recommendation letters from faculty. TAs can 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 conduct a midcourse survey for anonymous student feedback and you wish to set one up for yourself, please contact the Undergraduate Coordinator for help with a survey.

### 9.2 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 2024, Fall 2024, and Spring 2025 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 is \$1,500 for PhD TAs, \$1,000 for MS TAs, and \$750 for undergraduate TAs.

# 10 People

The most current list of who is who in the department can always be found at <https://stat.duke.edu/people/appointed-faculty/primary-faculty>.

In Fall 2024:

- Chair: Amy Herring - <https://scholars.duke.edu/person/Amy.Herring>
- DUS: Mine Çetinkaya-Rundel - <https://mine-cr.com>
- DGS: Merlise Clyde - <https://www2.stat.duke.edu/~clyde>
- MSD: Dawn Strickland - <https://scholars.duke.edu/person/dawn.strickland>
- Undergraduate coordinator: Joan Durso - <https://scholars.duke.edu/person/joan.combs.durso>, [joan.durso@duke.edu](mailto:joan.durso@duke.edu)
- DUS Assistant: Karen Whitesell - <https://stat.duke.edu/karen-c-whitesell>, [karen.whitesell@duke.edu](mailto:karen.whitesell@duke.edu)
- Business Manager: Nicole Scott - <https://stat.duke.edu/nicole-scott>, [nicole.scott@duke.edu](mailto:nicole.scott@duke.edu)