

College of the Environment, Forestry, and Natural Sciences

Department of Mathematics and Statistics

**HANDBOOK FOR GTAs
(GRADUATE
TEACHING ASSISTANTS)**

2026 – 2027

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DEPARTMENT OF MATHEMATICS AND STATISTICS

GRADUATE TEACHING ASSISTANT POLICIES

I. INTRODUCTION

This handbook sets forth some of the requirements regulating the teaching and classroom management of Graduate Teaching Assistants (GTAs) in the Department of Mathematics and Statistics here at NAU (Northern Arizona University). In addition, this handbook provides suggestions and resources for new and continuing GTAs who are facing challenges in the classroom or who strive to improve their teaching. Finally, this handbook explains the structure of support and accountability for GTAs provided by the Department of Mathematics and Statistics. In addition, see the NAU Office of Graduate and Professional Studies Graduate Assistantships Handbook in the Resources tab at <https://nau.edu/graduate-college/>.

II. GENERAL INFORMATION

Several teaching assistantships are offered each year by the Department of Mathematics and Statistics. This number varies from year to year according to budgetary limitations and student enrollment. A GTA must work about 20 hours per week performing teaching and teaching-related responsibilities.

Subject to the normally available funding and satisfactory progress toward completing the degree plan, a student who is offered an assistantship may expect four semesters of support as a GTA. Satisfactory progress for a teaching assistant means completion of 9 hours of coursework in their program each semester while maintaining at least a 3.0 cumulative grade point average. Continued support also requires that teaching duties be done professionally. See Sections IV and V below for more information.

The following is a tentative schedule of GTA duties for the 2026-2027 Academic Year:

Fall 2026 Semester

Tuesday, August 11 – Friday, August 14: first year GTA training

Monday, August 17 – Friday, August 21: Faculty Work Week/GTA training

Monday, August 24: Fall 2026 semester begins

Monday, September 7: Labor Day (university is closed)

Friday, October 23: Midterm grades due

Wednesday, November 11: Veterans Day (university is closed)

Thursday, November 26 and Friday, November 27: Thanksgiving break (university is closed)

** If you are scheduled to teach on Wednesday, November 25, you should plan to stay in Flagstaff until you have met your responsibilities. Check in with your course coordinator for specifics.

Monday, December 7 – Thursday, December 10: Final Exams

** You are required to review student grades with your Course Coordinator before submitting final grades. This may occur with your entire coordination group or individually. You need to stay in Flagstaff until this meeting occurs. Please speak with your specific Coordinator regarding the final grading schedule for your course.

Tuesday, December 15 – Final Grades due

Spring 2027 Semester

Monday, January 4 – Friday, January 8: Faculty Work Week/GTA training

** You should plan to return to Flagstaff no later than Sunday, January 3.

Monday, January 11: Spring 2025 semester begins

Monday, January 18: MLK Day (university is closed)

Friday, March 12: Midterm Grades due

Monday, March 15 – Friday, March 19: spring break (no classes are held)

Monday, May 3 – Thursday, May 6: Final Exams

** You will be required to review student grades with your Course Coordinator before submitting final grades. This may occur with your entire coordination group or individually. You need to stay in Flagstaff until this meeting occurs. Please speak with your specific Coordinator regarding the final grading schedule for your course.

Friday, May 7 or Saturday, May 8: CEFNS Graduation and Department Graduation Celebration

Tuesday, May 11: Final Grades due

The stipend for a GTA in the Department of Mathematics and Statistics working 20 hours per week for the 2026-2027 academic year is \$17,000. This amount is subject to change in future years. It is recommended you set up direct deposit with NAU HR. You can expect to be paid on the following days:

Date
September 4
September 18
October 2
October 16
October 30
November 13
November 27
December 11
December 25*
January 8*

Date
January 22*
February 5
February 19
March 5
March 19
April 2
April 16
April 30
May 14

*There is potential for *more* money to be withheld from these paychecks because you will not be enrolled as full-time students for some or all of these pay periods. That is, these paychecks may be smaller.

All GTAs at the university whose appointment is at least 10 hours per week receive a tuition waiver each semester of their appointment. GTAs who work 20 hours per week also receive a waiver of the student health insurance premium. All GTAs are expected to pay other applicable fees. The schedule of tuition and fees for the Fall 2027 semester is available at: http://nau.edu/SDAS/Tuition-Fees/Fall_Tuition/.

NAU requires payment of all student fees before the semester begins. Payment plans are available and will be spread out over 3 payments throughout the semester. Students can enroll in the payment plan for an additional fee of \$75. If students do not pay their balance by the due date and do not self-enroll in the payment plan, NAU will automatically enroll you in the payment plan for an additional fee of \$175. See <https://in.nau.edu/sdas/payment-plan/> for more details.

NAU policy states that a new GTA is on a probationary appointment for one semester, and that during this probationary period, a GTA can be released from employment without cause, without notice, and without a statement of reasons. For full details see the Probationary Period section of the NAU Office of Graduate and Professional Studies Graduate Assistantship Handbook at: http://www2.nau.edu/gradcol/GA/GA_Handbook.pdf.

III. SUPPORT FOR GTAS

Many faculty members and staff throughout the Department of Mathematics and Statistics serve roles providing direct support and guidance for GTAs in their teaching and academic endeavors.

GTA COORDINATOR

The GTA Coordinator – for 2026-2027, Dr. Gina Nabours – supports the teaching and academic responsibilities of GTAs, organizes training during Faculty Work Week, and conducts monthly meetings with all GTAs. The GTA Coordinator works closely with course coordinators and graduate faculty to ensure GTAs are receiving the support they need to be successful students and teachers, and they serve as the primary supervisor and evaluator of GTA performance.

LMC Director

The LMC Director – for 2026-2027, Matt Fahy – supports the teaching responsibilities of GTAs teaching in the LMC, organizes training during Faculty Work Week, and conducts monthly meetings with all GTAs. The LMC Director works closely with the GTA Coordinator and LMC course coordinators to ensure GTAs are receiving the support they need to be successful teachers.

ACADEMIC ADVISOR

Each graduate student is assigned an Academic Advisor. In addition to fulfilling the normal advising duties (providing course and program information, career advice, etc.), Academic Advisors support students in setting up their Comprehensive Oral Examination Committee or Research Committee.

GRADUATE OPERATIONS COMMITTEE

This committee oversees most academic issues for graduate students in the department. GTAs will be introduced to the chair of this committee, the Graduate Coordinator – for 2026-2027, Dr. Jeff Hovermill – and should address questions to them concerning advisor changes, transcript issues, degree requirements, course availability, thesis and oral exam possibilities, and any other academic questions that cannot be answered by an Academic Advisor.

COURSE COORDINATOR

Each GTA will teach one of the department's highly coordinated courses under the supervision of a Course Coordinator, who oversees and supports the teaching responsibilities of the GTA. Course Coordinators provide significant resources, guidelines, and informed advice regarding the teaching of a particular course.

Course Coordinators (with the support of a team of faculty) are required to observe the teaching of each GTA in their course at least once per semester, complete an evaluation form, and share their observations with the GTA and GTA Coordinator. Throughout the semester, the Course Coordinator will provide the GTA Coordinator with a summary evaluation of the GTA's work within the course.

IV. TYPICAL TEACHING DUTIES OF A GTA

In their first year, most GTAs can expect to be assigned to work in the Lumberjack Mathematics Center (LMC) teaching two sections of either MAT 100: *Mathematics Pathway*, MAT 108: *Algebra for Precalculus*, MAT 114: *Quantitative Reasoning*, or MAT 125: *Precalculus*. Some GTAs (most often second-year GTAs) may have the opportunity to teach, MAT 121: *Finite Mathematics with Calculus* or STA 270: *Introduction to Statistics*. Both of these latter courses are not taught in the LMC.

When a GTA is assigned as the instructor of a course in the department, they are responsible for all aspects of that course's delivery and management, under the supervision of a Course Coordinator (described above). To help prepare GTAs for these responsibilities, the department holds a first-year GTA

training before faculty work week. Both first- and second-year GTAs are involved in training during faculty work week.

During faculty work week, each GTA will attend course coordination meetings. In these meetings, GTAs will receive all necessary course information and materials. Since these are coordinated courses, the syllabus and policies are consistent across all sections. The GTAs are responsible for knowing, understanding, and enforcing all course, department, and university policies. Additional coordination meetings are held weekly throughout the semester. ***Attendance at these weekly meetings is mandatory.***

To further meet student needs, GTAs will hold office and/or lab hours (as assigned by the LMC Program Coordinator) on a consistent, scheduled basis. The priority for office and lab hours must always be attention to students. You *must* have a consistent space for your posted office hours and be present at these times regardless of student attendance. Office hours should be posted outside of your office so students know when they can find you. These office hours will also be shared with the LMC and with the Adel front office.

In addition to these *teaching* responsibilities, GTAs must also diligently prioritize their time to fulfill all the requirements of the courses they take as a *student*. The department strives to support and assist all GTAs in every aspect of their GTA experience. GTAs should utilize the aforementioned support positions – GTA Coordinator, Academic Advisor, etc. – when necessary, to ensure success as both students and teachers.

V. REQUIREMENTS OF GTAS

The following are some of the requirements to which GTAs must adhere in their teaching and classroom management. All other pertinent policies mentioned in other official documents of the Department of Mathematics and Statistics and Northern Arizona University must also be followed by GTAs. **Failure to adhere to these policies and otherwise maintain an acceptable level of professionalism will result in an Incident Report (See Appendix 2). Accumulating numerous incident reports could lead to a withdrawal of the assistantship.**

1. GTAs must be on time to teach all their classes. GTAs **must** be in the classroom at least 5 minutes before class is scheduled to begin so that class can start on time. Classes must also end on time; students will not be let out early nor will they be held late.

If a GTA teaches a course in the LMC and must miss a class session due to an unforeseen circumstance (illness, emergency, etc.), they should email their entire coordination team (including course coordinator) to find a suitable replacement, copying their Math Jack(s), the LMC Program Coordinator, GTA Coordinator, and LMC Director.

If a GTA teaches a course in Adel and must miss a class session due to an unforeseen circumstance (illness, emergency, etc.), they should email their entire coordination (including course coordinator) team to find a suitable replacement, copying both the GTA Coordinator and the Department of Mathematics and Statistics (AdelMathematics@nau.edu).

2. GTAs are required to hold regularly scheduled office hours (for Adel courses) or a combination of office and lab hours (for LMC courses) to provide further assistance to their students. GTAs are expected to be physically available to their students during their regularly-scheduled lab and office hours—no online or phone-in office hours are permitted. Missing any office or lab hours without prior communication is prohibited.

If a GTA works in the LMC Lab and must miss scheduled lab hours for any reason (appointment, illness, emergency, etc.), they should email fellow GTAs in an effort to get the shift covered, copying

the GTA Coordinator, the LMC Director, the Academic Program Coordinator, and the LMC front desk (Lumberjackmathcenter@nau.edu). They should meet with the Academic Program Coordinator upon their return to schedule make-up hours.

If a GTA teaches in Adel and must miss scheduled office hours, they should email their students, copying the GTA Coordinator, the Course Coordinator, and AdelMathematics@nau.edu to notify the department as well.

3. Most GTAs will be scheduled to proctor exams in the LMC Testing Room.

If a GTA is scheduled to work in the LMC Testing Room and must miss their shift due to an unforeseen circumstance (illness, emergency, etc.), they should email fellow GTAs to cover the shift, copying the GTA Coordinator, the LMC Program Coordinator, the LMC front desk, and the LMC Director. They should meet with the LMC Program Coordinator upon their return to schedule make-up hours.

4. GTAs must attend all regularly scheduled meetings held by their Course Coordinator (weekly) and the GTA Coordinator (monthly-ish). The GTA meetings during the fall semester of 2026 will be on Fridays from 4:15-5:45 in Adel 164, on September 11, October 2, October 23, November 13, and December 4. These meetings will include specific tasks each GTA must complete before the meeting (peer observations, trying new teaching strategies, etc.). These tasks will be communicated with GTAs throughout the semester.
5. GTAs are required to maintain an active working relationship with their Course Coordinator. Course Coordinators will either provide course teaching materials or support GTAs and instructors in creating their own. Any documents created by GTAs must be approved for classroom implementation by their Course Coordinator prior to distribution. Course Coordinators must also approve mid-semester and end-of-semester grades before they can be submitted by a GTA.
6. GTAs are expected to enforce policies in their classrooms, the LMC Lab, and LMC Testing Room, when applicable. These include (but are not limited to) policies on food, headphones, cell phone use, and academic integrity. The steps to be taken if a student violates the [Academic Integrity Policy](#) are detailed in the LMC Resources Canvas Shell.
7. GTAs must be aware of and hold to the guidelines for distributing student information determined by the Family Educational Rights and Privacy Act (FERPA). Online FERPA training is provided through the university and must be completed before GTAs can access important course information, such as class rosters. This training course is provided through an NAU Canvas Shell.
8. GTAs must complete an online NAU e-CERT (Conduct, Ethics, Reporting and Transparency) Report annually. Access to this report can be found in the GTA Training Canvas Module.
9. Northern Arizona University requires that an instructor have a course syllabus prepared for students on the first day of class. The Course Coordinator will provide the syllabus for all GTAs.
10. Each Course Coordinator will provide instructions for grade record keeping for their specific course. The GTAs must update grades for students each week.
11. To provide important and timely feedback, GTAs must return all assessments, written assignments, and projects to students as quickly as possible, except for the Final Exam. **Copies of Final Exams are never returned to students.** If a student would like to see their graded Final Exam, please direct them to your Course Coordinator. After submitting course grades, GTAs must clearly label and organize graded Final Exams and give them to the Adel office or LMC office.

12. The department makes every effort to equip all faculty with enough resources and facilities to provide excellent instruction to its students. Nevertheless, it is the responsibility of each instructor to be conscientious in their use of department resources, minimizing waste, and seeking ways to limit the use of department supplies and equipment.
13. GTAs must adhere to all applicable policies of the department and university. For more information, see the section titled *Ethics and Professionalism* of the Office of Graduate and Professional Studies College Graduate Assistantship Handbook at <https://acrobat.adobe.com/id/urn:aaid:sc:VA6C2:bb419a74-aaaa-4d59-8165-a0770af0ec1b>
14. Additional important information for all NAU graduate assistants to be aware of and understand, including University Requirements, Rights and Privileges of GAs, and Grievance Procedures for Gas is available at <https://acrobat.adobe.com/id/urn:aaid:sc:VA6C2:bb419a74-aaaa-4d59-8165-a0770af0ec1b>

VI. SUGGESTIONS FOR TEACHING

The following are suggestions for teaching and classroom management. They should support you in improving the quality of instruction you provide.

1. *Understand the syllabus.* The syllabus can be thought of as a contract between the instructor and the students, so careful attention is paid to the details which are included in it. Questions or concerns students have regarding course policies and procedures are often addressed in the syllabus, reducing decisions and difficulties that may arise during the semester. (Examples include policies about makeup tests, cell phones, calculators, and extra credit.) You are expected to clearly understand these policies.
2. *Strive to make the first day of class a clear reflection of the structure and nature of the overall course.* First impressions are especially important, and **students often draw strong conclusions about a course or instructor after the very first day.** At a minimum on the first day, GTAs should call roll; distribute, review, and answer questions on the syllabus; and provide a small amount of lecture. Carefully explaining the syllabus informs students of class procedures (when homework will be assigned and collected, how much material will be covered on each exam, whether calculators or notes can be used on tests, etc.). Providing time for lecture on the first day allows students to become familiar with their instructor's style of teaching.
3. *Learn student names as quickly as possible.* Knowing names and attempting to connect with students on a personal level shows them that you have an interest in their individual performance. Using “table tents” is an effective way to have student names available without memorizing all of them.
4. *Understand the content you teach from many perspectives.* Having a solid understanding of the material being covered is essential for effective instruction. As graduate students in mathematics or statistics, GTAs have significantly more background knowledge and experience with mathematical concepts than their students in introductory level mathematics courses. The art of teaching comes from being able to present course material while understanding and clarifying student content misconceptions in a way that supports their learning.
5. *Try to observe the teaching of faculty with more experience in courses like the one you are teaching.* GTAs should make the time to sit in on courses taught by several different instructors, especially during their first semester of teaching. This will expose them to management styles and methods for covering content.

6. *Build the answer to the question "Why?" into your lectures and presentations.* In preparing to teach a topic, you should make every effort to anticipate questions students may have and incorporate the answers to these questions into your explanation. A common example of this in mathematics and statistics courses is "why do we need to know this?" By understanding and showing the importance and application of the material, both within the course it is taught and within other courses and disciplines, an instructor can increase student interest and appreciation for a topic, as well as improve their overall motivation toward the course.
7. *Use a "snapshot philosophy" when working at the board or document camera.* For reasons good and bad, students often lose track of a lecture and must copy notes from the board or projector without following the flow of what they are writing or understanding its context. Recognizing this, you should not only endeavor to write clear and thorough notes on the board, but you should arrange your notes on the board in such a way that, if students were to take a "snapshot" of the board at any given time, they could make out the flow of thought and purpose behind the examples, definitions, explanations, etc. which you have written. Producing such a "snapshot" involves many factors, including: always proceeding in your notes from left to right and from top to bottom, just as English is read; writing in complete sentences with correct spelling; limiting the use of personal shorthand or abbreviations, and only using these when they are preceded by a careful explanation; clearly labeling drawings and graphs and annotating examples with pertinent references and reminders; distinguishing between different categories of text (e.g. definitions, theorems, examples, etc.); and **writing everything you expect the students to know and remember on the board.**
8. *Be conscientious and assertive regarding classroom management.* Even though GTAs will be teaching university courses, the possibility for discipline and behavior issues still unfortunately exists. As often as possible, situations should be avoided by stating clear policies in the syllabus governing issues such as attendance (including arriving late to and leaving early from class), cell phone use, etc. If instances do occur which the GTA feels merit attention, they must notify their Course Coordinator as soon as possible. If instances recur, the GTA should document these in writing and update their Course Coordinator as needed.
9. *Have fun.* Teaching is a rewarding opportunity to challenge and interact with students. GTAs should value their chance to be a positive influence on students and approach their teaching with excitement and enthusiasm. Unfortunately, many students in introductory mathematics courses have anxiety toward school in general and mathematics in particular, but a GTA who shows real enjoyment of the content being taught can make such students relaxed and more receptive to the material.

VII. GTA OVERSIGHT

The Department of Mathematics & Statistics is committed to the professional development of its GTAs. The GTA Coordinator is available to support all aspects of GTA life. Teaching-specific support for a GTA is provided by their Course Coordinator who will provide feedback through teaching observations and course coordination meetings. Student-specific support for a GTA is provided by their Academic Advisor, who will meet with them to ensure adequate progress is being made toward graduation requirements.

Teaching support for GTAs will occur in the following ways:

1. Each GTA will be observed in their classroom by their Course Coordinator or designated faculty member around weeks four-six of the semester. The observer will then complete a GTA Observation Form (Appendix 1). As soon as possible after the observation, the observer will meet with the GTA to discuss the observation, and both will sign the GTA form to document their discussion. This will be sent to the GTA Coordinator.

When appropriate, the Course Coordinator or GTA Coordinator will conduct further classroom observations later in the semester, completing a GTA Observation Form (Appendix 1) each time, meeting again with the GTA to discuss the observation, and signing the form along with the GTA to document their discussion.

2. The Course Coordinator checks gradebooks for regular updates. Not updating grades regularly, as determined by your Course Coordinator, may result in a negative Incident Report (submitted through Microsoft Forms)
3. Before submitting midterm and final semester grades, the Course Coordinator will discuss course grades with the GTA. GTAs must stay in Flagstaff at the end of each semester until these final semester grade meetings occur.
4. The GTA Coordinator will follow up with Course Coordinators weekly regarding GTA performance. The Course Coordinator, Department of Mathematics & Statistics and LMC Staff, and others, as appropriate, are required to report a GTA for any perceived negligence, inappropriate behavior, failure to fulfill required duties, unsatisfactory performance, etc. Except in cases of the most serious violations, the GTA will be given an opportunity to correct any problems that arise. When necessary, every effort will be made to support GTAs in improving their performance. Repeated issues with GTAs who are unable to improve their performance will be documented and shared with the Graduate Operations Committee and the Department Chair. A consistent pattern of poor performance may lead to the termination of the GTA's appointment.

APPENDIX 1: GTA Observation Form

Your Name	GTA's Name	
GTA's Teaching Assignment	Semester	Date

The GTA would like you to provide feedback on these issues (if applicable):

Approximate number of students present:

Make notes from what you observed here:

Briefly comment on these aspects/features of the class you observed:

GTA's punctuality

GTA's demeanor

Student engagement

Other observations of note:

Some specific things this GTA could improve upon:

Teaching Presentation Presents knowledge, information, and ideas and engages students through a variety of means, including active learning, lecture, discussion, demonstration, laboratory experiences, and direct consultation with students. ☐ Below Expectations ☐ Meets Expectations ☐ Exceeds Expectations
Suitability of Content Develops or delivers highly relevant, engaging content appropriate to the students' level. The amount of material covered fits well with what should be expected of this session. ☐ Below Expectations ☐ Meets Expectations ☐ Exceeds Expectations
Communication Style Articulates content with confidence. Presentation style is friendly, genuine, and animated. Teaching style promotes learning, engagement, strong bonds with students, and opportunities for focus and mental breaks. ☐ Below Expectations ☐ Meets Expectations ☐ Exceeds Expectations
Organization Prepares meaningful assignments and activities for students. ☐ Below Expectations ☐ Meets Expectations ☐ Exceeds Expectations
Evaluation of Students' Work Evaluates student work objectively and consistently; provides helpful feedback to students. ☐ Below Expectations ☐ Meets Expectations ☐ Exceeds Expectations
Learning Environment Employs effective pedagogical tools to stimulate critical thinking and/or creative abilities in students; provides clear, well-organized and easy to understand instructions; adheres to accepted standards of professional behavior in meeting responsibilities to students. ☐ Below Expectations ☐ Meets Expectations ☐ Exceeds Expectations

The signatures below document that we have met and discussed this observation. We have also discussed the recommendations of the observer and appropriate follow-up measures.

Observer's Signature	Date
GTA's Signature	Date