Graduate Teaching Assistantship Workloads
Department of Mathematics, CU Boulder

Date of this document

This document has been updated October 12, 2018, to apply to courses in Spring 2019. The document is subject to change.

Overview

The following document serves to describe the work responsibilities of the various Teaching Assistantship positions available in the Mathematics Department. The term *teaching assistant* refers to graduate students support by Teaching Assistantship positions through the graduate school. This includes both intructing and TA-ing, in the colloquial sense.

The duties described below are mandatory (including attending coordinator meetings, MARC hours, providing due diligence on grading, etc.) and failure to perform these duties is considered a failure to perform the job adequately. This document serves as a guide to both teaching assistants and coordinators as to the duties and expectations of the position. It is subject to change.

Rights and responsibilities, and discretion to deviate

The rights and responsibilities of course coordinator, teaching assistant, and departmental committees are described in a separate document, titled *Rights and Responsibilities*. That document will include the scope of discretion to deviate from this document, and will describe the power structure of the teaching team, and the consequence of failure to perform these duties. There are circumstances in which deviation is encouraged. The present document is only a description of the typical teaching assistantship duties.

Time commitment

Teaching Assistantships are 20 hr/week positions, under the direction of a course coordinator. These duties last for 1 week before instruction begins, 15 weeks of instruction, and 1 week of final exams. During the first and last weeks, duties will be lighter (e.g. no contact hours), but the student is expected to be available for coordinator meetings, grading etc., as applicable. In particular, teaching assistants are expected to participate in proctoring and grading final exams (so travel should be planned accordingly). For the most part, hours can be expected to be performed during regular working hours (i.e. when classes are scheduled, i.e. 8 am to 6 pm on weekdays), but during midterm weeks and exam weeks, evening and even nighttime proctoring and/or grading may be expected.

Respect, cooperation and support

Teaching assistants are expected to respect the decisions of the course coordinator. All members of the team are expected to participate constructively in cooperative tasks, and to maintain a

supportive environment in meetings and teamwork, which includes respectful discourse in the face of disagreements. The course coordinator is expected to protect teaching assistants from unexpected circumstances and overloads in work. The course coordinator is expected to provide a supportive environment for the development of teaching assistants as teachers. This may include helping teaching assistants experiment pedagogically by providing them pedagogical freedom and supporting them during the process. The entire teaching team is expected to support one another in the face of challenges.

Sharing and crediting of materials

Every member of the teaching team is encouraged to share materials that they produce for the course. This may include lecture notes, review sheets, etc. To encourage such cooperation (which benefits everyone), if anyone produces such materials, appropriate recognition is expected. For example, other team members who use such materials in the classroom are expected to credit the creator.

Descriptions of Duty Categories

1. **Contact hours.** These are the hours in the classroom, lecturing or leading recitations.

2. **Coordinator meeting.** These are the regularly scheduled teamwide coordination meetings run by the coordinator.

3. **MARC hours.** These are the hours the student will be present in the Mathematics Resource Center (MARC) as a tutor. The MARC has a commitment to service, and the guiding principle is *Learning is Dignity*. While serving as MARC tutors, teaching assistants are expected to create a safe and respectful environment, and contribute to a robust, productive and supportive experience for undergraduate students. MARC tutors are expected to perform the duties outlined in the accompanying MARC document, including being punctual, available, respectful, and efficient.

4. **Office hours.** These are regularly scheduled office hours during which the student is available to undergraduate students in the course.

5. **Preparation hours.** These are hours outside of regular meetings, used by the student for all manner of course preparation. They may include writing and printing quizzes, printing projects, reviewing projects or background, writing lectures and creating materials for undergraduate students, updating websites, among other things.

6. **Grading hours.** These are regular weekly hours outside of regular meetings, used by the student to provide detailed written feedback on assignments or quizzes and to assign grades for these or other graded aspects of the course. This also includes collating and inputting grades. This does not include midterm and final grading, which is included under the category of 'irregular hours'. Students are expected to provide useful written feedback. Although it may sometimes seem that undergraduate students do not make good use of such feedback, they deserve such attention to detail.

7. **Extra student hours.** This includes interactions with undergraduate students above and beyond contact hours, MARC hours, and office hours. This may include email and one-on-one meetings on any course-related topic.

8. **Irregular hours.** These are hours which do not follow a regular weekly pattern. This number represents an average number of hours per week over the semester. It includes midterm

preparation, grading and proctoring, and accommodations for undergraduate students with documentation from Disability Services. It may include LaTeX'ing materials. It is expected that these hours vary greatly week-to-week, with most time being concentrated on midterm weeks. During midterm weeks, teaching assistants may be expected to attend scheduled grading meetings in the evening or even nighttime hours.

Adjustments for First Timers

Experience in a particular position generally reduces preparation time. The breakdowns shown here are for experienced teaching assistants. Consequently,

1. Students who are TAing for the first time (not for the first time per course, but first time overall), should have a 3 section load, instead of the default 4 section load, in the case of Calculus I/II or Pre-Calculus. If a change in section load is not applicable, such teaching assistants are exempt from one MARC hour. This will generally apply to graduate students in the fall of their first year.

2. Students who are preparing to lecture a course for the first time (first time for that course), are exempt from one MARC hour to allow for more preparation time.

Adjustments for 5905

First-year graduate students taking Math 5905 may reduce their MARC hours by one. This does not apply to second-year graduate students.

Calculus Workloads

Calculus I covers the basics of integration and differentiation. Calculus II covers more integration, and sequences and series. Calculus III is multivariable calculus.

Calculus I/II TAs will generally be given 4 section workloads. Exceptions are for first-time TAs (first time TAing at all, i.e. primarily first-year first-semester graduate students).

Calculus III TAs will generally be given 3 sections the first time, and 4 sections if TAing again (which case won't occur frequently, since most students will only TA Calc III once in the current assignment system).

Math 1300/2300, Calculus I/II, TA, 3 Sections

Contact hours	3
Coordinator meeting	1
MARC hours	4
Office hours	0
Preparation hours	2
Grading hours	6
Extra student hours	1
Irregular hours	3
Total	20

Notes:

- This course generally has 3 midterms and an exam, all requiring late-night grading.
- All contact hours are generally on Thursdays.
- The 3-section assignment is primarily for first-time teaching assistants and is designed to leave more time for preparation.
- TAs with three sections (instead of four) are expected to proctor all midterms and exams.

Math 1300/2300, Calculus I/II, TA, 4 Sections

Contact hours	4
Coordinator meeting	1
MARC hours	3
Office hours	0
Preparation hours	1
Grading hours	8
Extra student hours	1
Irregular hours	2
Total	20

Notes:

- This course generally has 3 midterms and an exam, all requiring late-night grading.
- All contact hours are generally on Thursdays.
- A 4-section TA workload in Calculus I/II is the usual load.
- TAs with four sections (instead of three) are released from proctoring all midterms and exams.

Math 2400, Calculus III, TA, 3 Sections

Contact hours	3
Coordinator meeting	1
MARC hours	4
Office hours	0
Preparation hours	3
Grading hours	6
Extra student hours	1
Irregular hours	2
Total	20

Notes:

- This course generally has 3 midterms and an exam, all requiring late-night grading.
- All contact hours are generally on Thursdays.
- The first time on Calc III, Calc III TAs are expected to have only 3 sections.
- TAs are expected to proctor all midterms/exams.

Math 2400, Calculus III, TA, 4 Sections

Contact hours	4
Coordinator meeting	1
MARC hours	2
Office hours	0
Preparation hours	2
Grading hours	8
Extra student hours	1
Irregular hours	2
Total	20

Notes:

- This course generally has 3 midterms and an exam, all requiring late-night grading.
- All contact hours are generally on Thursdays.
- The 4 Section case is for students who are TA'ing Calc III again.
- TAs are expected to proctor all midterms/exams.

Math 1300/2300/2400, Calculus I/II/III, Instructor

Contact hours	4
Coordinator meeting	1
MARC hours	1
Office hours	1
Preparation hours	7
Grading hours	2
Extra student hours	1
Irregular hours	3
Total	20

Notes:

- Classes generally meet MTWF.
- This course generally has 3 midterms and an exam, all requiring late-night grading.

Calculus for Life Sciences Workloads

This course introduces calculus concepts in an applied way. The material differs significantly from the regular calculus sequence. Whether the TA has 3 or 4 Sections will depend on the number of sections offered.

Math 1310, Calc for Life, TA, 3 Sections

Contact hours	3
Coordinator meeting	1
MARC hours	5
Office hours	0
Preparation hours	2
Grading hours	6
Extra student hours	1
Irregular hours	2
Total	20

Notes:

- This course generally has 3 midterms and an exam, all requiring late-night grading.
- All contact hours are generally on Thursdays.
- TAs are expected to proctor all midterms/exams.

Math 1310, Calc for Life, TA, 4 Sections

Contact hours	4
Coordinator meeting	1
MARC hours	4
Office hours	0
Preparation hours	2
Grading hours	6
Extra student hours	1
Irregular hours	2
Total	20

Notes:

- This course generally has 3 midterms and an exam, all requiring late-night grading.
- All contact hours are generally on Thursdays.
- TAs are expected to proctor all midterms/exams.

Math 1310, Calc for Life, Instructor

Contact hours	4
Coordinator meeting	1
MARC hours	3
Office hours	2
Preparation hours	4
Grading hours	2
Extra student hours	1
Irregular hours	3
Total	20

Notes:

- This course generally has 3 midterms and an exam, all requiring late-night grading.
- The above breakdown assumes lecture notes are provided by the coordinator.
- Classes generally meet MTWF.

Pre-Calculus Workloads

This course covers material preparatory to our calculus sequence. The 4-Section TAship is typical, but for teaching assistants who are TAing for the first time (i.e. generally first-year students in fall), will be given a 3-Section load.

Math 1150, Pre-Calculus, TA, 3 Sections

Contact hours	3
Coordinator meeting	1
MARC hours	4
Office hours	0
Preparation hours	4
Grading hours	6
Extra student hours	1
Irregular hours	1
Total	20

Notes:

- Contact hours are all on Tuesdays.
- There is no exam grading (it is scantron).
- TAs often proctor extra-time exams.
- The 3-Section TAship is generally only for first-time TAs.

Math 1150, Pre-Calculus, TA, 4 Section

Contact hours	4
Coordinator meeting	1
MARC hours	2
Office hours	0
Preparation hours	3
Grading hours	8
Extra student hours	1
Irregular hours	1
Total	20

Notes:

- Contact hours are all on Tuesdays.
- There is no exam grading (it is scantron).
- TAs often proctor extra-time exams.
- TAships are typically 4 sections.

Math 1150, Pre-Calculus, Instructor

Contact hours	3
Coordinator meeting	1
MARC hours	3
Office hours	2
Preparation hours	6
Grading hours	3
Extra student hours	1
Irregular hours	1
Total	20

Notes:

- Classes meet MWF.
- There is no exam grading (it is scantron).

Data & Models, and Statistics Workloads

Math 1212 covers material preparatory to Statistics, which is Math 2510.

Math 1212, Data & Models (pre-stats), Instructor

Contact hours	3
Coordinator meeting	1
MARC hours	3
Office hours	2
Preparation hours	6
Grading hours	2
Extra student hours	1
Irregular hours	2
Total	20

Notes:

- This course meets MWF.
- This course is flipped, meaning class consists of groupwork.
- There is an LA in class two days a week.
- This class has 2 midterms, but grading is not coordinated in evenings.
- Weekly grading consists of worksheets and quizzes.

Math 2510, Statistics, Instructor

Contact hours	3
Coordinator meeting	1
MARC hours	3
Office hours	2
Preparation hours	6
Grading hours	2
Extra student hours	1
Irregular hours	2
Total	20

Notes:

- This course meets MWF.
- This course is flipped, meaning class consists of groupwork.
- There is an LA in class two days a week.
- This class has 2 midterms, but grading is not coordinated in evenings.
- Weekly grading consists of worksheets and quizzes.