#### Physics Department Teaching Assistant's Guide Fall 2022

Disclaimer: This document does not supersede your contractual obligations as a Teaching assistant.

**Purpose:**This document's purpose is to guide you in fulfilling your responsibilities as a Teaching Assistant in the Physics Department.

Teaching is a core mission of the Physics department at NMT. To support this mission, the department offers Teaching Assistantships to well-qualified graduate students and occasionally to outstanding undergraduate students.

# 1 Teaching Supervisors

Generally, the department chair determines the distribution of TAs to cover the department's needs. Teaching assistants helping with Freshman Physics Recitations or in advanced classes or labs are supervised by the professor teaching the lecture or lab. On the other hand, Teaching assistants teaching Freshman labs are under the supervision of the Physics department Lab Director. Hence, you could have several teaching supervisors.

## 2 Expectations

Regardless of your assigned task, you are now part of the Physics department Staff and are expected to behave responsibly and professionally. In what follows, we go into some detail to give you some guidance so you can fulfill specific department's expectations.

Full-Time Teaching Assistants in our department are expected to work 20 hours per week. If you are teaching in upper division classes or labs, the breakdown of your workload is determined by your supervisor. Table 2 shows a typical breakdown for Freshman Physics. Note that, time-wise, teaching two recitations is equivalent to teaching a Lab.

| ble 1. Nominal workload breakdown for Freshman Physics. |          |               |                     |           |  |  |  |  |
|---|----------|---------------|---------------------|-----------|--|--|--|--|
| Full TA   | 2  labs  | 2  labs       | 1 lab 2 recitations | 1 lab     |  |  |  |  |
|   | Same Lab | Different Lab | (same class)        | (half TA) |  |  |  |  |
| Instruction   | 5        | 5             | 6.5                 | 2.5       |  |  |  |  |
| Office hours  | 2        | 2             | 2                   | 1         |  |  |  |  |
| Prep  | 2        | 4             | 4                   | 1         |  |  |  |  |
| Briefing  | 1        | 1             | 1                   | 1         |  |  |  |  |
| Lab dry runs  | 1        | 2             | 1                   | 1         |  |  |  |  |
| Grading   | 6        | 6             | 3                   | 3.5       |  |  |  |  |
| Help sessions (Rest)                                    | 3        | 0             | 2.5                 | 0         |  |  |  |  |
| Total   | 20       | 20            | 20                  | 10        |  |  |  |  |

Table 1. Nominal workload breakdown for Freshman Physics.

Help sessions outside the department are coordinated with the Office for Student Learning (OSL).

### 2.1 Planned absences

From time to time, scheduled events that could not be rescheduled occur. For instance, Dr. appointments, attending a conference, or participating in a tournament. In these situations, it is expected that TAs will make arrangements for their session to be covered. It is reasonable to ask fellow TAs for help. Returning the favor is, of course, expected.

## 2.2 Unexpected events

Certainly, there are occasions when unforeseen events come up. To mitigate the impact of these events, we expect our TAs to support each other and, as much as possible, make themselves available to step in as substitutes at a moment's notice. It may seem that this system is prone to abuses, but at least in the academic world, abuses are rare. The system works because reputation has an enormous value in our professional lives.

## 2.3 Evaluations

There are two kinds of evaluations: student and supervisor evaluations.

**Student evaluations** This type of evaluation apply only to Lab TAs. The Tech's administration gives these evaluations through CANVAS at the end of the semester. The evaluation consists of questions to rank some aspects of the Student's instruction. The ranking goes from 1 (Poor) to 5 (Excellent).

To give you a sense of the type of questions, here are the questions used in previous semesters:

- 1. Think about what the instructor has done to plan and deliver this course. Please rate the overall quality of instruction in this course.
- 2. The instructor was well-organized when it came to this course.
- 3. Grading expectations were clear about which items would be graded and their relative grading worth.
- 4. Please rate the instructor's presentation of the material in terms of clarity.
- 5. The professor was accessible to answer questions and explain the material, possibly outside of class.
- 6. Was this course sufficiently challenging that it pushed you to raise your expectations of yourself?

The students are also offered the opportunity to write comments about the instruction.

Lab TAs receive student feedback through these evaluations, which may help you improve your teaching practices. In addition, these evaluations are used to support nominations for the Fallon Award  $^1$ 

<sup>&</sup>lt;sup>1</sup>The Fallon Award is given to the graduate student who does the best job of teaching physics labs or recitations. The award is given on a yearly bases.

**Supervisor Evaluations** This evaluation is performed by your teaching supervisor and is reported to the Physics Graduate Committee, which assesses your overall performance in the physics program.

TAs assigned to upper-division courses or Freshman recitations may be evaluated using different criteria depending on the class. For TAs assigned to Freshman Labs, a Rubric with the criteria described in Table 2 is generally applied.

| Criteria      | Expectations  | Outstanding | Good | Average | Poor | Failing |
|---------------|---|-------------|------|---------|------|---------|
|               |   | A++         | A    | В       | C    | F       |
| Attendance    | You should be prepared for<br>and attend every lab and<br>be a few minutes early (5 is<br>sufficient) to check the lab<br>and let students in, so the lab<br>can start on time.   |             |      |         |      |         |
| Briefings     | You should participate and<br>share your concerns and expe-<br>riences. Before the briefing,<br>you should read about the<br>lab topic; seasoned TAs are<br>encouraged and expected to<br>share their expertise.  |             |      |         |      |         |
| Dry Run       | You should collect data using<br>the corresponding raw data<br>sheet before your lab.   |             |      |         |      |         |
| Grading       | The expected turnaround for<br>graded work is about a week;<br>occasionally, things come up,<br>so although not optimal, two<br>weeks is not unreasonable;<br>more than three weeks is<br>considered too much time to<br>give students timely feedback. |             |      |         |      |         |
| Office Hours  | You should be available and<br>responsive to the Student's<br>questions.  |             |      |         |      |         |
| Help Sessions | You should behave profession-<br>ally (being on time, prepared,<br>and ready to help).  |             |      |         |      |         |

Table 2. Rubric to Evaluate Performance in Freshman Labs.