

**UNIVERSITY OF WASHINGTON**  
**PHYSICS DEPARTMENT**  
**OVERVIEW OF TEACHING ASSISTANT ASSIGNMENTS**  
**(2004-05)**

**I. GENERAL INFORMATION**

Teaching Assistant (TA) stipends will be \$1327/month between September 16, 2004 and June 15, 2005. You will also receive a tuition waiver. You are responsible for incidental fees amounting to approximately \$200 each quarter and \$35 if you choose to keep your UW issued bus pass (U-Pass). Stipends for Teaching Assistants are currently subject to withholding of income tax. You are required to register for at least **10 credits** each academic quarter. The courses must be at the 300-level or higher, but 300-level courses do not count towards a graduate degree. Courses that are audited DO NOT count in the 10-credit requirement. Your tuition waiver will not get processed if you are not registered for at least 10 credits.

If you are required to take English as a Second (ESL) courses, you must complete them in order to maintain satisfactory progress and keep your Teaching Assistantship. There are a limited number of Teaching Assistantship positions available for summer quarters. First year students are given priority, but performance is also a factor when determining TA assignments. Students are strongly encouraged to find a Research Assistantship.

All first year Teaching Assistants are required to enroll in Physics 501, 502, 503, Tutorials in Teaching Physics, as part of the department's TA Training Program and as part of their TA assignment. Most first year TAs will teach introductory laboratories or the tutorial sections associated with the introductory calculus-based physics course. Duties for these courses include weekly training and preparation meetings, working with students in the laboratory or classroom, grading assignments, and working with students in the Physics Study Center, a drop-in facility where students can get academic help from graduate students (See Section V.)

**II. LABORATORY TEACHING**

A faculty member is in charge of each laboratory course and will prepare the laboratory manual and syllabus. He or she will help you by having weekly meetings to discuss the experiment of the week. The two introductory laboratory sequences have the greatest number of sections. Both of these sequences (to be described more in later paragraphs) have many sections each with a typical enrollment of 22 students. Most lab sections are 3 hours long and are held once a week. The upper division laboratories are usually assigned to TAs who are in their second or third year of graduate school.

*A. Physics 117, 118, 119*

This optional sequence is associated with the introductory algebra-based physics lectures course (Physics 114, 115, 116). The students are mainly majoring in one of the health sciences and are often planning to enter medical or dental school. Students

from fisheries, oceanography, architecture, building construction, forestry, and other majors also take this course. They will usually be freshmen or sophomores.

### B. *Physics 121, 122, 123*

This mandatory sequence is part of the introductory calculus-based physics lectures course (Physics 121, 122, 123). The students are mainly majoring in engineering, computer science, or one of the physical sciences. While the experiments done by the 117 and 121 sequence students are similar, differences do occur. Several topics are presented in the algebra-based course, which are not discussed in the calculus-based one and the 121 sequence often requires students to perform additional analysis.

## III. TUTORIALS

The classes in Physics 121 (Mechanics), 122 (E&M), and 123 (Waves and Optics) each have a weekly one-hour tutorial. In these tutorials the students work in small groups to solve worksheets that are designed to address difficulties with understanding physics. The class size is 20-24 and there are typically 2-3 instructors in each section. TAs who are assigned to the tutorials are required to enroll in 501-2-3, which serves as a weekly training meeting. During this meeting student difficulties will be analyzed and the worksheets will be discussed. The format of the meeting will help prepare each TA for the classroom activities. A typical TA will be part of the instructional team in 3-4 tutorials and will participate in grading homework and exams.

## IV. OTHER TA ASSIGNMENTS

There are a variety of other TA assignments in the department. The most common assignment is grading for a lecture course. These grading assignments range from the introductory algebra-based lecture to graduate level courses. The duties include grading of problem sets and examinations. Typically, the upper division and graduate courses are assigned to the advanced graduate students.

## V. PHYSICS STUDY CENTER

In order to aid students who have questions about their course work in the introductory courses, a Study Center is provided where students may obtain help on an individual basis. The Physics Department provides assistance for students in Phys 114, 115 and 116 and Phys 121, 122 and 123. The Study Center is located at the mezzanine level of the Physics/Astronomy Building A-wing, immediately below the large lecture halls. The rooms are generally open from 8:00 AM to 6:00 PM and are staffed by TAs and faculty at times given by the Physics Study Center TA Schedule.

The objective of the Center is to provide a location where students working on common problems can meet to discuss their work. Seating in the Center is arranged by class to encourage discussion and shared problem solving. For many of the Center hours, TA's and faculty are available for extra assistance. A Physics Study Center TA Schedule is posted outside of PAB C139B. A sign-up sheet insures that students needing help are served in the order in which they request it. At the busiest times of the day, generally 11:30 to 2:30, it is not always possible to give individual assistance to all

students within a reasonable time period. However, small groups working on similar problems can expect to be helped with problems they cannot solve collectively.