# Physics & Astronomy

### Teaching Assistant Professional Development Program

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All training information, including module slideshows can be found at: <u>www.phas.ubc.ca/~phys\_ta</u>





# Skills & Competencies for new TAs

### Fall Workshop

- Socratic questioning
- Formative evaluation
- Learning goals
- Presentation practice
- Culture & diversity

### Course-Specific Training

- Marking
- Presenting particular labs/tutorials
- Ongoing support & follow-up

### Mentor Program

- In-situ feedback
- Deliberate practice
- Reflection
- Ongoing support & follow-up

# Skills & Competencies for senior TAs

#### Coordinators

- Fall workshop development & delivery
- Facilitation of all TAPD programs
- Funding & budget
- Peer mentoring
- Culture & diversity training
- Gather feedback throughout the term

#### Head TAs

- Development & delivery of coursespecific training
- Peer mentoring
- Course administration & development
- Receive feedback through final surveys
- Culture & diversity training

#### Mentors

- Peer review training
- Mentoring & role model experience
- Observing other teaching styles
- Culture & diversity training
- Receive feedback from observations & discussions

### Course-Wide Core Workshop

- Developed by graduates students for graduate students
- □ The workshop is a paid mandatory training for all new TAs
- All graduate courses are cancelled for the duration of the workshop to ensure participation



### **From Learning to Teaching**

TAs explore their own positive and negative learning experiences to determine the important aspects of teaching

- Effectively sets the stage for later modules by demonstrating the difference between learnercentred and teacher-centred learning
- Serves as an ice-breaker and sets a tone of open dialogue for the rest of the workshop

### Teaching by Questioning

TAs watch and critique recordings of real TA-student interactions and imagine what they would do if they stepped in and took over

- Introduces the use of Socratic questioning techniques in the classroom
- Videos are from the University of Maryland PER group

Learning Goals in the Lab

TAs discuss learning goals and their role in the lab setting. They are given the opportunity to examine a sample lab from a first year physics course and develop a proper set of learning goals for it.

- Motivate the importance of learning goals in a lab or classroom setting for both teaching and learning purposes
- TAs learn how to make their learning goals specific, measurable and attainable.

#### **Course-Specific Training**

TAs attend a training session specific to the course they will TA in the upcoming semester. The training is coordinated by the courses' Head-TA(s) and provides all the necessary tools and training TAs will need to comfortably lead their first lab or tutorial.

- Allows TAs to practice delivering a properly structured introduction to their peers
- Provides a platform for receiving and giving constructive feedback and evaluation
- Focuses on skills specific to courses, such as marking, working with large groups, and problem solving

### **Formative Evaluation**

TAs learn effective techniques for obtaining constructive feedback from students

- Highlights the different roles of feedback in the classroom, such as
  - Improving one's performance as a TA
  - Assessing the students' understanding as new concepts are introduced
- Refers to techniques and questionnaires that TAs have already seen and participated in throughout the workshop

Module 6

#### **Creating inclusive classrooms**

TAs explore the impact of their identity/culture on their teaching and learning experiences and discuss sensitive situations presented via several case-studies.

- Fosters an open and interactive environment ideal for discussion of complex gender and diversity issues
- Focuses on issues that could be encountered in a classroom, which are relevant to the TA positions
- Note: TAs in leadership roles also receive formal training from the Center for Inter-Cultural Communication (CIC) so that diversity can be incorporated into all elements of the training program

## **Ongoing Course-Specific Training**

Head TAs also have the opportunity to:

- Conduct optional workshops later in the term to:
  - Help refine new TAs' teaching techniques
  - Address any issues that may have arisen since the fall workshop
- □ Assist the course instructor with course development
- Facilitate communication between the TAs and the instructor

Note: Head TA duties vary widely depending on the nature of the course

### Mentor TA program

Each new TA is paired with a single Mentor TA for the duration of the fall term, and participates in a series of peer-review sessions.

- All mentors participate in a peer review training session offered by the Center for Teaching Learning and Technology (CTLT)
- The program is facilitated by a Mentor Coordinator whose main responsibilities are to:
  - communicate with and support the mentors
  - coordinate the pairing of mentors with mentees
  - act as a liaison with the TA Training Facilitators

### Mentor Program Overview



### Changes in 2012

Course Specific Training:

- New Head TA positions to more extensively cover firstyear courses in both semesters
- Address issues of buy-in from all TAs (new and returning) to participate in course-specific training
- Core workshop:
  - Develop a "Job Overview" module including a presentation from a CUPE 2278 representative
  - TA Handbook will be developed to provide TAs with resources, clear job descriptions, teaching techniques and management skills

### Changes in 2012 cont'd

- Mentor Program:
  - Require two sets of observations (the second of which is either by a peer or the mentor TA)
- Other:
  - Create new TA teaching award
  - Facilitate rigorous hiring process
  - Develop regular brown-bag lunch sessions for graduate students to discuss teaching issues