

# Physics & Astronomy

## Teaching Assistant Professional Development Program

TAPD Facilitators (2011/2012)

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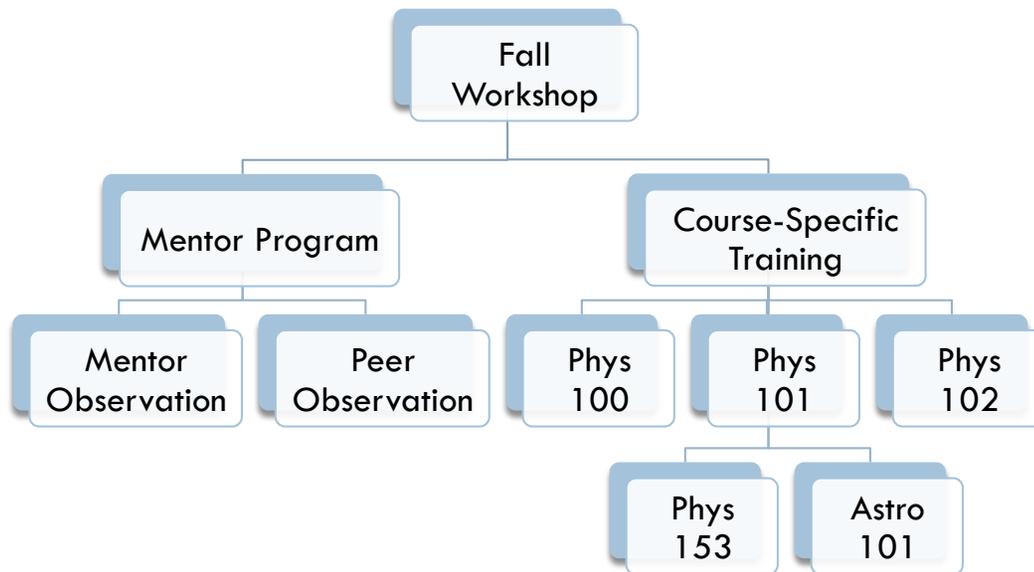
All training information, including module slideshows can be found at:

[www.phas.ubc.ca/~phys\\_ta](http://www.phas.ubc.ca/~phys_ta)

# Program Overview

## For New TAs

## For Senior TAs



# 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

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

## CSTFs

- Workshop development & delivery
- 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

# Improvements for 2011

## Based on 2010 feedback

2010-11	2011-12
Fall workshop over 1 long day	Fall workshop splits over 2 half days
Course-specific training delivered after fall workshop	First course-specific training will be integrated in the 2 <sup>nd</sup> day of the fall workshop
New TAs were observed by mentors in class	New TAs will also be invited to observe their mentor in class

## Program expansions

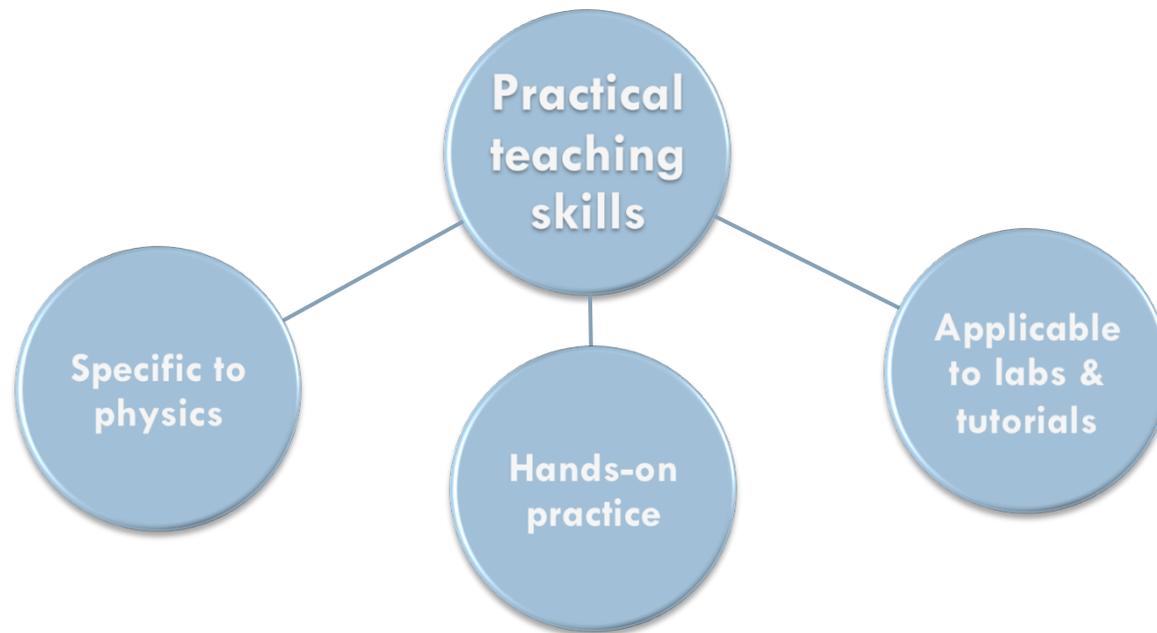
New CSTFs will be hired for term 2 due to large TA turnover

New CSTFs will be hired explicitly for lab or tutorial components

Astro101 will now have a CSTF

# Course-Wide Fall Workshop

- Developed by graduate 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



# Fall Workshop

## Module 1

### **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 learner-centred and teacher-centred learning
- Serves as an ice-breaker and sets a tone of open dialogue for the rest of the workshop

# Fall Workshop

## Module 2

### 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

# Fall Workshop

## Module 3

### **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

# Fall Workshop

## Module 4

### **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 an introduction for it.*

- Introduces the importance of learning goals in the lab
- Allows TAs to practice delivering a properly structured introduction to their peers
- Provides a platform for receiving and giving constructive feedback and evaluation

# Fall Workshop

## Module 5

### **Gender and Diversity**

*TAs explore definitions of their identities and discuss possible origins for opinions expressed in several case-studies.*

- Fosters an open and interactive environment ideal for discussion of sensitive 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*

# Course-Specific Training



- Coordinated by graduate students as Course-Specific Teaching Facilitators (CSTFs)
- A course-specific workshop integrated in the fall workshop provides all the necessary tools and training TAs will need to comfortably lead their first lab or tutorial
- Focuses on skills specific to courses, such as marking, working with large groups, and problem solving

# Course-Specific Training



CSTFs 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: CSTF duties vary widely depending on the nature of the course*

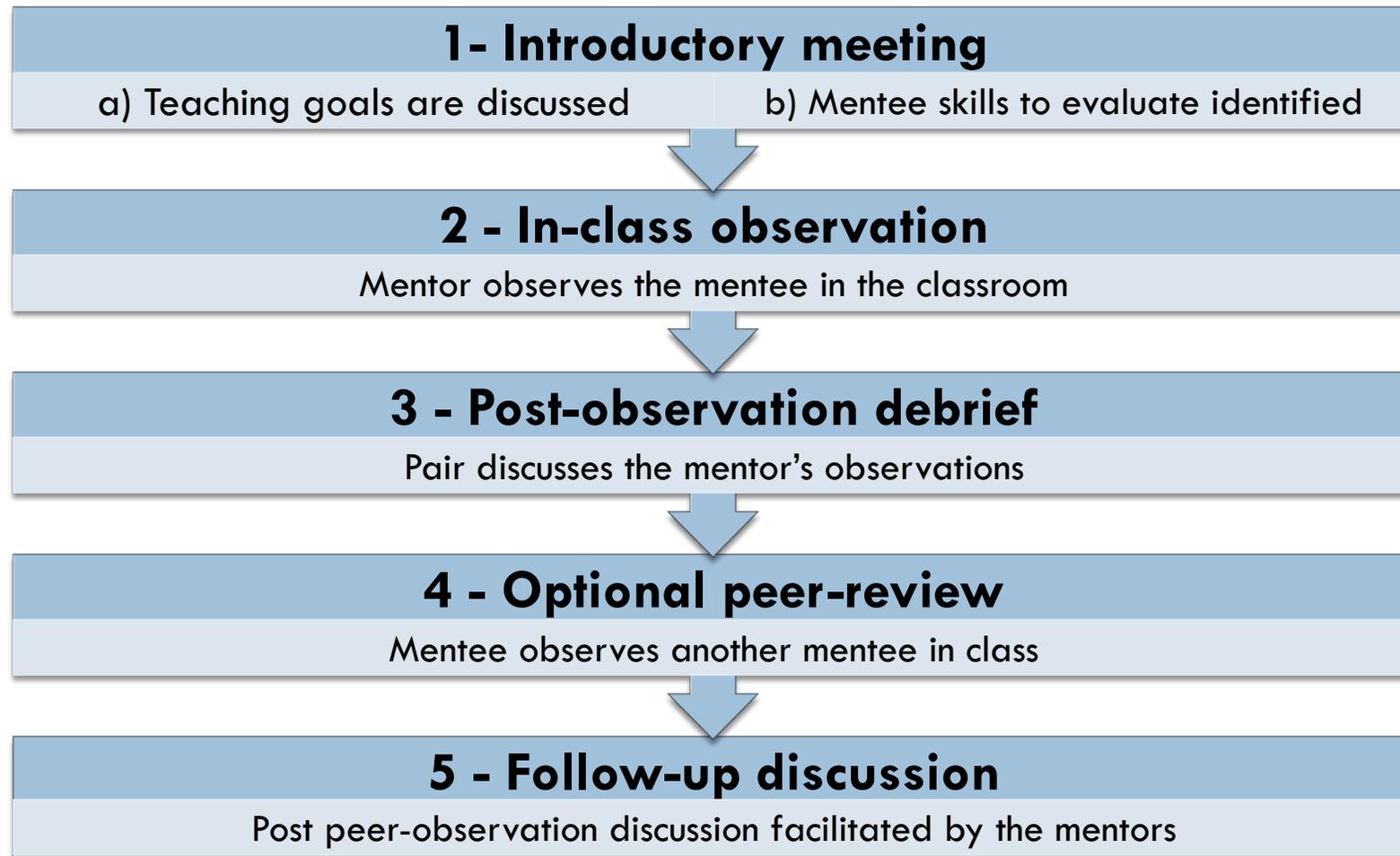
# Mentor TA program



*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, formerly TAG)
- The program is mainly facilitated by a Head Mentor whose responsibilities are to:
  - communicate with and support the mentors
  - coordinates the pairing of mentors with mentees
  - act as a liaison with the TA Training Facilitators

# Mentor Program Overview



# Testimonials from new TAs



*“[The TAPD program] is absolutely necessary! I wouldn't have liked to go in front of a class without any training/advice. This training had a very positive impact on my teaching overall.”*

*“[The training] provides good concrete ideas for how to approach teaching, and it makes the TA aware of how his or her teaching might be improved.”*

*“The workshop gives everyone a chance to meet one another and provides useful hands-on experience.”*

*“Having a TA training program really improves the overall quality of teaching and shows that UBC is taking teaching seriously.”*