CSE599: Teaching Methods in Computer Science

CSE 1202
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Expect Today…

• Professional expectations

• Working well with professors
  – Managing different expectations / personalities

• Time balance
  – Web Site, Meetings, Assessment

• Practicum: "live" discussion presentation
Learning Goals: CSE 599

1. Describe the basic roles and responsibilities of TAs at UC San Diego and how one should use these to discuss expectations with the professor.

2. Implement strategies for effective time-management when working within a team.

12. Observe and critique someone else’s lecture with regard to student learning. Put into practice core boardwork, organizational, and speaking practices to support effective explanations of computing topics.

13. Speak succinctly, effectively, and engagingly on a technical computing topic.
TA Roles: Recap

- Possible activities you might be asked to do
  - Teach discussion sections
  - Hold office hours
  - Design assignments
  - Proofread assignments and/or exams
  - Write solutions for assignments and/or exams
  - Grade and/or manage fair grading of assignments and/or exams
  - Field re-grade requests
  - Answer questions online (piazza / email)
  - Proctor exams
  - Detect student academic integrity violations
  - Help the professor run the course
  - Maintain the gradebook
  - Maintain the website
TA Roles: Recap

- But you almost certainly shouldn't be ...
  - Confronting students about cheating
  - Dealing with over-argumentative students
  - Making decisions about student exceptions (sick family members, etc.)
  - Teaching the lecture class
Imagine you are a TA for CSE 8A now

• Please answer the following student questions
  1. What are the dates of the midterm exams?
  2. What time and date is PSA2 due?
  3. Do I have to work with a partner?
  4. What time are the discussion sections on Mondays?
As a TA, you must always be right

When giving information about class policies, due dates, expectations, etc., giving wrong information is a disaster.

Never ...

• Guess

• Base an answer off what it was like when you took the class (or TAed it before)

• Just say "I don't know" and leave it at that

Always:

• Look up the answer in official course resources (syllabus, HW write up, Piazza, slides, etc.)

• Know who the right person to ask is (but try to look it up first)

• Prepare in advance (but still look it up unless you are 100% sure)
TAs make a huge difference

• Student Expectations
  - Assignments should be clear (including consistent notation)
  - Solutions should be error-free
  - Grading should be fair
  - Staff should be present / on-time

• (Additional) Professor Expectations
  - Professionalism (this is your job)
  - Respectful (of everyone)
What does professional behavior look like?
What does professional behavior look like?

- Respect the students
  - Respect different experiences / perspectives / cultures
  - Don't give in to your own frustration
  - Be careful with your tone
  - Don't state or imply anything negative about a student "we learned this in week 1, don't you know this by now?"

A student who needs help feels vulnerable. Your #1 job is to help them arrive at a better place in their learning.

What are some good things to say to a frustrated / confused / angry student?
What does professional behavior look like?

- Be prepared and be on time
  - for office hours
  - for team meetings
  - for discussion sections
  - for grading sessions

What does being prepared for office hours mean?
What does professional behavior look like?

- Meet your commitments / be reliable
  - follow through when you say you'll do something
  - get your work done on time
  - be responsive to your (UCSD) email
  - process student / instructor requests in a timely fashion

What is a timely fashion?
What does professional behavior look like?

- Be positive about
  - UCSD
  - the class
  - the instructor and the rest of the staff
  - the course material (textbook, assignments, online tools, etc.) ***
  - Computer Science

You are the official face of the class!
What does professional behavior look like?

- Dress appropriately
  - Shower and use deodorant

- Be ethical
  - What are examples of unethical behavior?

- Uphold academic integrity
  - Know what academic integrity looks like (and what violates it).
  - What are some subtle (or not so subtle) examples of academic integrity violation? What do you do in this case?
Professor Personalities

• We all run classes differently

• We all have TAs play different roles
  - Just grade / give support
  - Help design assignments / play a bigger role
  - Run my class for me

• We all have different management styles
  - Top down
  - Team effort
  - Adaptive
  - Everything in between

• We vary in communication style
Communicating feedback

What do you think this email / statement means?

In reply to your e-mail asking if students can submit late assignments, the professor replies: "No. The syllabus on the class website states that there are no late submissions."
Communicating feedback

What do you think this email / statement means?

After attending your discussion section: “I liked your examples of X and Y during discussion today. Keep up the good work!”
Communicating feedback

What do you think this email / statement means?

In reply to you sending the professor the solutions for the first homework: "Question 1 - this solution is off by 1, it should be... Question 3 - the answer is correct, but the justification is wrong, it should be ... Please be more careful with the solutions in the future."
Communicating feedback

What do you think this email / statement means?

Email from the professor: “Ugh – we didn’t consider case X in assignment 2. Please update the grading rubric and post to piazza that students can use either option.”
Communicating feedback

What do you think this email / statement means?

Email from the professor: "As we discussed last week, you are the lead for assignment 3. I have not yet received a draft and we need to post it tomorrow. Please send me what you have so far."
Communicating feedback

What do you think this email / statement means?

Email from the professor: "The CSE8A staff meeting in CSE 3217 started 10 minutes ago."
TAs Time Balance

What are your biggest concerns?
TAs Time Balance

• Use time wisely
  - Redirect students to resources (website, Piazza)
  - E-mail "Exponential back-off"
  - Use prior course resources / consult with prior TAs
  - Optimize logistics tasks (can tech help?)

• Keep track of your time
  - Set aside research / your class time vs. TA time
  - Context switching is bad for performance
  - Try to keep a line between work / personal time
Some concrete examples

Student asks when the next assignment is due, you send a quick e-mail of the due date.
Some concrete examples

Student writes a long e-mail to you asking about references vs. primitive types. You send a 1 page response trying to clearly articulate the differences.
Some concrete examples

Student comes by your lab office asking to discuss a grade on an assignment.
Take-aways

• Much of what makes for a good teacher/class happens outside the class.

• Being a good TA is often about being professional and the standards are much higher than standards for a student.

• Recognize that different professors see TAs playing different roles.

• Be careful with your time and communicate about potential issues.
Homework for Next Time

• Weekly: Check class website for assignment

• Assignments
  - To do this week: grading exercise, prepare a rubric
  - Practicum assignment, using rubrics