Teaching Your First Course

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Outline

• Planning your first day
• Transitioning to faculty teaching
• Creating a syllabus
• Finding resources
• Designing homework and exams
• Soliciting feedback
• Responding to student challenges
• Recruiting TAs
• Managing TAs
• Preparing for faculty teaching
Planning your first day

• Seem interested and smile
• Set expectations:
  • “I will start and end on time”
  • “Please put your cellphones and laptops away”
  • “I want this course to challenge you!” (Leslie et al., 2015)
• Use active learning (Theobald et al., 2020; Freeman et al. 2014)
  • “Point at the person you’re going to talk to.”
  • “In 10 seconds, shout your partner’s name, 10, 9...”
  • “We’ll come back together in 5, 4, 3, 2, 1.”
• Manage show-offy questions
  • “Good question, but outside the scope of this course. If I were in the course, I’d be intimidated, but I’m sure that wasn’t your intention. Let’s chat about it after class.”
  • Be ready to say “I don’t know. I can get back to you.”
• Make your learning goals explicit
Transitioning to faculty teaching

• Develop curriculum
  • Determine learning objectives: conceptual material and skills
  • Select textbook(s) and other resources to use
  • Create lecture materials and in-class activities
  • Create assignments, quizzes, and exams
• Manage teaching assistants and graders
  • Develop student engagement plan
  • Set criteria and deadlines for grading and oversee quality
• Handle administrative tasks
  • Order books
  • Manage student enrollment
  • Report struggling students to college
  • Handle requests for extensions, regrades, missed exams, etc.
  • Determine final grades
Creating a syllabus

• Copy someone’s syllabus
  • Find required statements for Title IX, accommodations, counseling center, cheating, etc.
  • Write a sentence above each to signal it is important.

• Copy someone’s course materials
  • You are not the first person to teach this content!
    • You can make small changes to catch or reduce cheating
    • For later courses, use “Backward Course Design” (link)

• Create a reading list for a graduate course
  • Pull from courses you took and articles you reference
  • Articulate your policies for late assignments etc.
Finding resources

• Look for courses/syllabi at similar institutions
  • Email the instructor for anything they are willing to share
• Post on SIGCSE to request materials
  • SIGCSE-members@listserv.acm.org
• Look for a book that covers the course content
  • Publishers will often send you the book and slides
• Look for “peer-instruction” slides
  • peerinstruction4cs.org/
• Look for individual assignments to integrate
  • nifty.stanford.edu
  • engage-csedu.org
  • acm.org/education/CS2013-final-report.pdf
• Use tools to check for cheating on programming assignments
  • https://theory.stanford.edu/~aiken/moss/
Designing assignments

- Consider low stakes, short assignments/quizzes and higher stakes, longer assignments with checkpoints
- Design questions that help students learn the material
  - Focus on fundamental material and common misunderstandings
  - Create questions that ask students to stretch, but not too much
  - Design for good students, not most experienced students
  - Consider challenge problems
  - Create questions that work for different learning styles
- Limit time needed for work and use repetition intentionally
- Create assignments that are easy to grade
- Coordinate deadlines in common classes
Designing exams

• Be aware of time
  • Students will take longer than you to answer questions
  • How long it will take to grade each question
• Ask questions in manner similar to assignment questions
• Create questions at different difficulty levels
• Have someone else take the exam prior to test day
• You can give people points if you mess up
Soliciting feedback

• Never read your teaching evaluations
  • Have a TA, colleague, or friend summarize them
• Always tell students about the feedback and your plans
• Do not identify as a “good teacher”
  • “I would be offended if you think I don’t care. I need feedback!”
  • You should be embarrassed about how you taught the content in the past!
• Ask for feedback at the 5-minute level
• Take notes *during* class about feedback and questions
Responding to student challenges

• Understand reporting requirements
  • First year and athlete progress reports
  • Unsatisfactory progress reports anytime
  • Honor code violations

• Learn about on-campus resources
  • Well-being, financial, and academic resources

• Track accommodations
  • Reach out to students with accommodations to establish protocol

• Be aware of student attendance and progress
  • Keep attendance record informally
  • Keep overall grade spreadsheet and check every few weeks

• Reach out to struggling students early
  • Frame outreach as connecting them to resources to help them succeed
Responding to student challenges

- Create a plan for accommodations and request info early
- Provide a seamless way to request extension
- Find helpful colleagues
  - “Who would you recommend for advice during the semester about responding to unexpected student situations?”
- Create clear articulation of what counts as cheating
Recruiting TAs

• Three approaches
  • Centralized system for assignments with no feedback
  • Centralized system where you and students can rank options
  • Decentralized system where you recruit students directly
• Get student recommendations from colleagues
  • Ask about student’s grasp of material, level of responsibility, and personality
• Reach out to recommended students
Managing TAs

- Convey the importance of meeting deadlines
- Convey the importance of respectful student interactions
- Design a plan for office hours based on deadlines
  - Ask TAs to fit into that plan and only modify plan very selectively
- Design and share grading deadlines before semester starts
  - Try to have consistent deadlines
  - Allow more time or assign less work around midterms and breaks
  - Consider scheduling grading sessions
  - Schedule time for you to finish unfinished grading
- Solicit feedback
  - Check in weekly with TAs about attendance and common questions
  - Solicit student feedback with anonymous survey or other mechanism
Preparing for faculty teaching

- Sit in on or TA courses that you might eventually teach
- Teach a lecture or co-teach a course
  - Consider teaching at local institutions
- Teach in a summer outreach program or winter terms
- Propose revisions to a course
- Seek out training at a Teaching and Learning Center
- Postdoc jobs with teaching or visiting faculty positions
Questions?