

Teaching Your First Course



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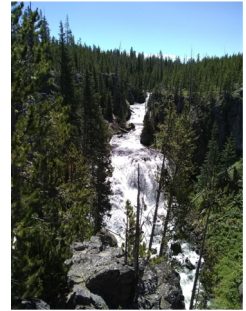
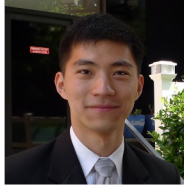
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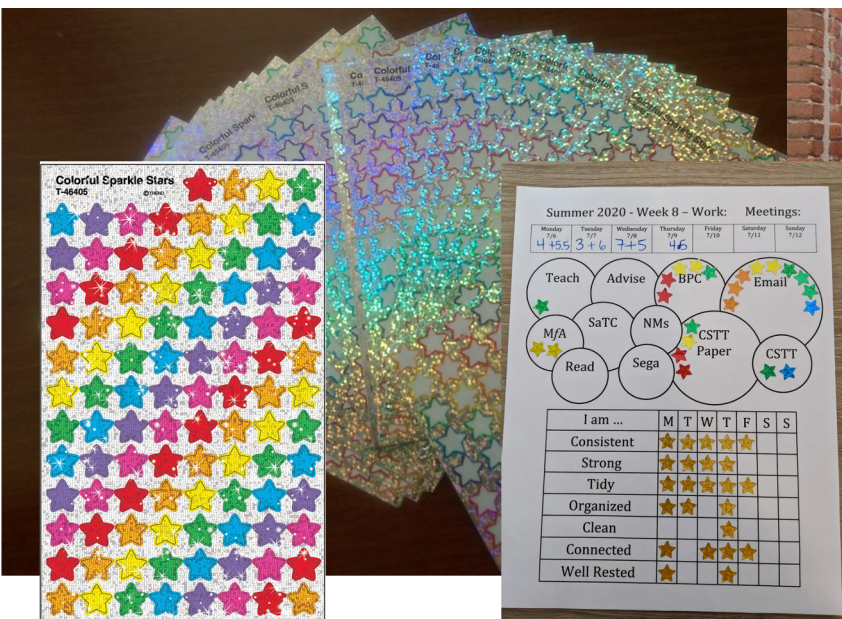


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Outline

- 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



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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



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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



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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.



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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/>



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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



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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



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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



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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



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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



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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



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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



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Questions?



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