

Technical Communication in Computer Science: Teaching, Speaking, Writing

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Goals

1. To give Ph.D. students an admittedly modest exposure to the literature on teaching techniques and on life as an academic.
2. To lead students in thinking about teaching as a *design* challenge, not a challenge of presentation of material: ***The job of the teacher is to design learning experiences.***
3. To have students practice techniques of planning, preparation, assignment design, and presentation.

Upon completing the course, the student will be able to:

1. Find help for common teaching problems in familiar literature.
2. Design a course syllabus and schedule.
3. Select a textbook.
4. Design lessons for varied learning styles.
5. Design exercises and quizzes.
6. Prepare and deliver classes using a variety of different teaching methods.
7. Assign grades fairly.

Policies, logistics, etc.

- An anticipated schedule is given on the next page. This schedule should be taken as a working document. It may change, e.g., due to snow days, people dropping or adding the class, unanticipated travel by the instructors, etc. We will keep an up-to-date version on the class webpage.
- Each student will design and lead a 20-minute lesson on a topic of their choice. The 20 minutes is for your lesson as prepared. Questions and discussion are not counted against your time. Lessons often are, but don't have to be, computer science topics. For example, in the past, we've had lessons on ballroom dancing, juggling, frisbee throwing, etc. Obviously, any lesson this year would have to be Covid-safe (e.g., proposing to teach us how to whistle is probably not a good idea).
- Each student will help and critique a partner in their lesson preparation and rehearsal.
- Most assignments will consist of a reading and a two-page essay. Last paper will be the exam.
- **Name, date, and honor code pledge** on everything you give us.
- **Note:** *Much of the material you will receive has been taken verbatim from material prepared previously by Dr. Fred Brooks (with his permission).*

This class has a closed-laptop, iPad, etc. policy.

Grading: Based on class teaching, assignments, and **participation**. Broad curve. Two free late assignments if turned in next class; other late assignments are half-credit.

Time and Place: Fridays, 10:30am-Noon, FB 007.

Web: <https://cs.unc.edu/~anderson/teach/comp915/>

Text: Svinicki & McKeachie, *McKeachie's Teaching Tips*, 14th Edition, 2011, Wadsworth.

We're currently trying to buy enough copies for the whole class. There should also be a copy in the Reading Room.

COMP 915 Syllabus for Spring 2022

Anticipated Schedule

Jan 14	1. Intro to the Course (Objectives, How it will Work) A Brief History of Teaching Elementary Public Speaking Determine Student Presentation Order, Discuss Role of Coaches	Jim Jim Jim Jim
Jan 21	2. Snow Day	
Jan 28	3. Finishing up “Elementary Public Speaking” Course Planning: Objectives, Learning Styles, Bloom’s Taxonomy	Jim Samarjit
Feb 4	4. Why Should You get a Ph.D.? Student Lessons: Joshua Bakita & Clara Hobbs	Jim
Feb 11	5. Course Planning: Syllabus, Topological Sort, Schedule, Textbook Selection Teaching Controversial Issues Student Lessons: Dongxu Zhao & Chao Zhao	Samarjit Samarjit
Feb 18	6. Course Planning: Large Classes (Attend a Large Class Before this Class) How to do Reviews Student Lesson: Peter Hase	Kris Jordan Samarjit
Feb 25	7. Writing Student Lessons: Xiang Zhou & Shuxian Wang	Jim
Mar 4	8. Writing (Continued) Student Lessons: Daniel Korn & Shiyue Zhang	Jim
Mar 11	9. How to Teach Research; Finding Thesis Topics (Attend Two Defenses Before the End of the Semester) Dealing with Students Who Cause Problems or are Having Problems, When and Where to Get Help, FERPA Student Lesson: Youngjoong Kwon	Jim Jim
Mar 18	Spring Break	
Mar 25	10. Course Planning: Project Courses Student Lessons: Randal Tuggle & Tao Tao	Samarjit
Apr 1	11. Active Learning Student Lessons: Peirong Liu & Samuel George	Jim
Apr 8	12. Motivating Students, Providing Students Useful Feedback, Grading Student Lesson: Yubo Zhang	Samarjit
Apr 15	Good Friday	
Apr 22	13. Quizzes and Examinations; How to Prepare for Oral Exams Teacher as a Professional: Economics, Compensation, the Academic Marketplace, Job Talks, Publish or Perish, Time Budgeting, Professional Ethics Student Lesson: Andrew Wortas	Samarjit Jim

*The teacher’s job is to **design learning experiences**, not to **dispense information**.*

University Resources:

Accessibility Resources: The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities. Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: <https://ars.unc.edu> or email ars@unc.edu.

Counseling and Psychological Services (CAPS): CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Title IX Resources: Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.

Spring 2022 Course Delivery: As long as it is possible to do so safely, we will be meeting in person this semester. We understand the ongoing COVID-19 pandemic may require changes to this plan and will be monitoring the situation closely. If we need to change the format of the course temporarily due to outbreaks of illness, we will announce this via email.