

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. Final grade: 40% lesson, 40% assignments, 20% class participation.

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.

Last spring, we bought copies for everyone to borrow one, but when this course was taught in the fall, the books weren't returned. We're still working on getting them back.

COMP 915 Syllabus for Spring 2023

Anticipated Schedule

Jan 13	1. Intro to the Course (Objectives, How it will Work) A Brief History of Teaching Determine Student Presentation Order, Discuss Role of Coaches	Jim Jim Jim
Jan 20	2. Elementary Public Speaking Course Planning: Objectives, Learning Styles, Bloom's Taxonomy	Jim Don
Jan 27	3. Finishing up "Course Planning: Objectives, ..." Why Should You get a Ph.D.? Student Lesson: Somnath Chowdhury	Don Jim
Feb 3	4. Course Planning: Syllabus, Topological Sort, Schedule, Textbook Selection Student Lessons: Shareef Ahmed & Kenya Martinez	Don
Feb 10	5. Teaching Controversial Issues Student Lessons: Ian Thomas & Syed Ali	Don
Feb 17	6. Course Planning: Large Classes (Attend a Large Class Before this Class) How to do Reviews Student Lesson: Bryce Ikeda	Kris Jordan Don
Feb 24	7. Writing Student Lessons: Chi-Jane Chen & Olawumi Olasunkanmi	Jim
Mar 3	8. Writing (Continued) Student Lessons: Anvesh Vijjini & Asiyah Ahmad	Jim
Mar 10	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: Boqi Chen	Jim Jim
Mar 17	Spring Break	
Mar 24	10. Course Planning: Project Courses Student Lessons: Joseph Goh & Swarnadeep Saha	Don
Mar 31	11. Active Learning Student Lessons: Nikhil Kandpal & Kathryn Kirchoff	Jim
Apr 7	12. Good Friday	
Apr 14	Motivating Students, Providing Students Useful Feedback, Grading Student Lesson: Yan-Bo Lin	Don
Apr 21	13. Quizzes and Examinations; How to Prepare for Oral Exams Student Lesson: Peter Tong	Don
Apr 28	14. Teacher as a Professional: Economics, Compensation, the Academic Marketplace, Job Talks, Publish or Perish, Time Budgeting, Professional Ethics Student Lesson: Asadullah Turja	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.