COMP 915 Syllabus for Spring 2023

Technical Communication in Computer Science: Teaching, Speaking, Writing

Jim Anderson (anderson@cs.unc.edu) and Don Porter (porter@cs.unc.edu)

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/


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.
Anticipated Schedule

Jan 13  1. Intro to the Course (Objectives, How it will Work) Jim
   A Brief History of Teaching Jim
   Determine Student Presentation Order, Discuss Role of Coaches Jim

Jan 20  2. Elementary Public Speaking Jim
   Course Planning: Objectives, Learning Styles, Bloom’s Taxonomy Don

Jan 27  3. Finishing up “Course Planning: Objectives, …” Don
   Why Should You get a Ph.D.? Jim
   Student Lesson: Somnath Chowdhury

Feb 3  4. Course Planning: Syllabus, Topological Sort, Schedule, Textbook Selection Don
   Student Lessons: Shareef Ahmed & Kenya Martinez

Feb 10  5. Teaching Controversial Issues Don
   Student Lessons: Ian Thomas & Syed Ali

Feb 17  6. Course Planning: Large Classes (Attend a Large Class Before this Class) Kris Jordan
   How to do Reviews Don
   Student Lesson: Bryce Ikeda

Feb 24  7. Writing Jim
   Student Lessons: Chi-Jane Chen & Olawumi Olasunkanmi

Mar 3  8. Writing (Continued) Jim
   Student Lessons: Anvesh Vijjini & Asiyah Ahmad

Mar 10  9. How to Teach Research; Finding Thesis Topics (Attend Two Defenses Before the End of the Semester) Jim
   Dealing with Students Who Cause Problems or are Having Problems, When and Where to Get Help, FERPA Jim
   Student Lesson: Boqi Chen

Mar 17  Spring Break

Mar 24 10. Course Planning: Project Courses Don
   Student Lessons: Joseph Goh & Swarnadeep Saha

Mar 31 11. Active Learning Jim
   Student Lessons: Nikhil Kandpal & Kathryn Kirchoff

Apr 7  12. Good Friday

Apr 14  Motivating Students, Providing Students Useful Feedback, Grading Don
   Student Lesson: Yan-Bo Lin

Apr 21 13. Quizzes and Examinations; How to Prepare for Oral Exams Don
   Student Lesson: Peter Tong

Apr 28 14. Teacher as a Professional: Economics, Compensation, the Academic Marketplace, Job Talks, Publish or Perish, Time Budgeting, Professional Ethics Jim
   Student Lesson: Asadullah Turja

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.