#### COMP 915 Syllabus for Spring 2017

## Technical Communication in Computer Science: Teaching, Speaking, Writing

Jim Anderson (<a href="mailto:anderson@cs.unc.edu">and Sanjoy Baruah (<a href="mailto:baruah@cs.unc.edu">baruah@cs.unc.edu</a>), with help from Fred Brooks (<a href="mailto:brooks@cs.unc.edu">brooks@cs.unc.edu</a>), Kevin Jeffay (<a href="mailto:jeffay@cs.unc.edu">jeffay@cs.unc.edu</a>), and Kris Jordan (<a href="mailto:kris@cs.unc.edu">kris@cs.unc.edu</a>)

#### 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. Your lesson will be videotaped and you are expected to watch the tape.
- 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. 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 141.

Web: <a href="https://cs.unc.edu/~anderson/teach/comp915/">https://cs.unc.edu/~anderson/teach/comp915/</a>

**Text:** Svinicki & McKeachie, *McKeachie's Teaching Tips*, 14th Edition, 2011, Wadsworth. It's expensive. Useful if you plan a teaching career. Otherwise, read in Reading Room.

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# **Anticipated Schedule**

Jan 13	1.	Intro to the Course (Objectives, How it will Work) Teaching as Design Elementary Public Speaking Determine Student Presentation Order, Discuss Role of Coaches	Jim Fred Jim Jim
Jan 20	2.	Course Planning: Objectives, Learning Styles, Bloom's Taxonomy	Sanjoy
Jan 27	3.	Course Planning: Syllabus, Topological Sort, Schedule, Textbook Selection Student Lesson: Marc Eder	Sanjoy
Feb 3	4.	Why Should You Get a Ph.D.? Student Lessons: Tanya Amert & Bhushan Jain	Jim
Feb 10	5.	Course Planning: Large Classes (Attend a Large Class Before this Class) Student Lessons: Eunbyung Park & Sahil Narang	Kris
Feb 17	6.	Teaching Controversial Issues (Jim out of town, Gary Bishop sitting in) Student Lessons: Tao Zhang & Yue Guo	Sanjoy
Feb 24	7.	Writing	Jim
		Student Lessons: Tetsuya Takahashi & Weizi Li	
Mar 3	8.	Writing (Continued)	Jim
		Student Lessons: Shan Yang & Yang Zhan	
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 Student Lesson: Amogh Akshintala	Kevin
Mar 17		Spring Break	
Mar 24	10.	Course Planning: Project Courses Student Lessons: Catherine Nemitz & Chong Shao	Prasun
Mar 31	11.	The Inverted Classroom (Jim & Sanjoy out of town) Student Lesson: Nie Dong	Kevin
Apr 7 12.		Motivating Students, Providing Students Useful Feedback, Grading, Cheating, The Honor Court	Sanjoy
Apr 14		Student Lessons: Christopher Horning & Ernest Cheung  Good Friday	
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Apr 21	۱ <b>3</b> .	Quizzes and Examinations; How to Prepare for Oral Exams (Jim out of town) Student Lessons: Auston Sterling & Nicolas Morales	Fred
Apr 28	14.	Teacher as a Professional: Economics, Compensation, the Academic Marketplace Job Talks, Publish or Perish, Time Budgeting, Professional Ethics	e, Jim

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

Student Lesson: Yizheng Jiao