

**University of Colorado**  
**Department of Computer Science**  
**Research in the CS Department**  
**Fall 2002**

**General Information**

**Catalog Number:** CSCI 7900 Section 940

**Time/Place:** most tuesdays 4:30-5:30pm in ECOT 831

**Web Page:** [www.cs.colorado.edu/~lizb/phd.html](http://www.cs.colorado.edu/~lizb/phd.html)

**Texts:** *Elements of Style*, Strunk & White, Longman, 2000.  
*The Lives of a Cell*, Thomas, Penguin, 1974.

**Instructor:** Liz Bradley ECOT 524  
lizb@cs.colorado.edu 303-492-5355

**Office Hours:** tuesdays 1:30-3pm; check my web page for updates/travel/etc.

**Description:**

This “course” is a one-semester introduction to research in computer science at the University of Colorado. It is designed to help you navigate the beginning of your career as a computer science researcher. Roughly half of our time will be spent on the mechanics of the process: giving you a roadmap and some landmarks (e.g., what journals and grant proposals are and why you should care), learning how to understand and produce lectures, papers, colloquia, etc. We will also spend some time talking about some of the subtle, difficult stuff that gets lost in the flurry of normal coursework: what research really is, how to pick good problems, etc. I will also be arranging field trips and visits from other faculty in order to give you a brief overview of what’s going on in the department and at the other research entities around Boulder (e.g., NCAR, the BP visualization center, etc.).

**Assignments:**

This course will not have a heavy workload, nor a traditional one. You will be expected to prepare for and attend several of the fall colloquia, and postprocess them with the group. You will be expected to give at least one short presentation to the group. We will work on paper-writing, but the paper involved can be for another course (or an old one you want to revise). You will be expected to read a few journal papers—from the literature and perhaps (anonymously; don’t worry) from your classmates—and produce reviews and abstracts of them. Lastly, you will be expected to participate in class discussions, group work sessions, etc.

More about all of this later.

**Grades:**

Grade granularity is very coarse in this course: A, B, C, or F. A means you participated, tried, contributed, and improved. C means you sat there like a lump, failed to turn stuff in, and showed no improvement. B is somewhere in between. F means I never saw you.

## Topics

- Mechanics [50%]
  - the CU CS Ph.D. process
  - understanding talks, papers, and abstracts
  - producing talks, papers, and abstracts
  - forums: journals, conferences, etc.
  - funding
  - teaching
  - service (e.g., reviewing papers and grant proposals)
- Philosophy [20%]
  - what research is
  - becoming a member of a research community
  - how to pick problems
  - how to pick an advisor
  - how to pick a thesis committee
  - academia vs. industry vs. govt lab
  - research vs. development
- Instances [30%]
  - colloquium preps & discussions
  - lab tours
  - area introductions