

CSC 590: Computer Science Thesis Seminar

Instructor

Gene Fisher (gfisher@calpoly.edu)

Office: 14-210, 756-2416

Office Hours: MW 4-5PM, Tu 9-11AM, F 11AM-12PM, other times by appointment

Prerequisites

This class is intended to be a co-requisite or nearby prerequisite for the first quarter of thesis work -- CSC 596. You should have at least a good idea of a thesis topic when you take CSC 590, or better yet, have already chosen a thesis topic and advisor. If you are not that far along in your graduate studies, you should wait to take CSC 590 until you are. Given sufficient demand, CSC 590 is offered every quarter, so you won't have to wait an entire year if you do not enroll this quarter.

Course Objectives

- To learn what is involved in writing a thesis.
- To learn how to do research.
- To learn how to present research, orally and in writing.

Course Materials

The recommended "textbook" for the course is student membership in the ACM digital library. Access to ACM's digital library is available from campus computers, but it's a nice bit of Computer Science citizenship to become a member of the ACM, and support its efforts. Student membership is very cheap.

Other course material is available on the class website, at

`users.csc.calpoly.edu/~gfisher/clases/590`

This online material is organized in the following major directories:

- lectures -- online version of the course lecture notes
- handouts -- online version of course informational material, including the assignment writeups
- reference -- links to useful reference material
- examples -- selected examples for the assignments, including examples from past 590 students

Assignments

There are five assignments for the class. The assignments revolve around developing your area of thesis research, evaluating other peoples' research, writing about it, and giving two oral presentations.

A summary of the assignments follows, with an indication of the percentage each is worth. A more detailed description will be provided for each, when the assignments are distributed.

1. Write a "blurb" on your MS research, including an initial bibliography; present your topic to the class. (15%)
2. Read two MS theses in your area of research and critique them. (15%)
3. Design a research validation framework for your thesis work (20%).
4. Prepare and deliver a 25-minute oral presentation of your research topic. (25%)
5. Prepare what is or could be the related work section of your thesis. (25%)

Exams

There are no in-class exams for the class. The final exam period will be used for oral presentations.

Class Wiki

The collaborative resource area for the course is the CSC 590 PolyLearn site, which you access through your normal Poly portal connection. *Everyone* in the course has *complete* access to the site, including edit access to all material posted on the site. Administratively, full access privileges are granted by giving everyone in the course instructor-level privileges.

The PolyLearn site will be used to post all assignment deliverables as well as other collaborative course content. Administrative course materials, such as handouts and lecture notes, are stored on a course web site separate from the wiki.

Since the PolyLearn site is a genuine collaborative wiki, class members must exercise appropriate wiki etiquette. Most particularly, no one should arbitrarily edit or delete content posted by another class member, without first consulting with the class member about the proposed edits.

Lecture and Assignment Schedule

The following is a week-by-week schedule of lectures and due dates. Note for week 3, class meets on Tuesday instead of Monday. For week 7, class meets on both Monday and Friday, with the Friday meeting substituting for the Monday of week 8. The final exam is Wednesday 10:10AM to 1:00PM. It will consist of 8 oral presentations.

Week	Date	Topic/Activity	Assignment Due
1	31 Mar	Holiday (April Fool's Day)	
2	7 Apr	Introduction to the class	
3	14 Apr	The computer science literature Thesis structure and evaluation	
4	21 Apr	Brief oral presentations	1
5	28 Apr	Thesis preparation, related work	
6	5 May	Thesis preparation, validation	2
7	12 May	Defending the thesis	
8	19 May	Long oral presentations	5
9	26 May	Holiday, no class	
10	3 Jun	Long oral presentations	5
Finals	9 Jun	Long oral presentations	5
	11 Jun	Final writeups	3, 4, 5