CSC 590: Thesis Seminar  
Spring 2016  
Course Syllabus  

March 28, 2016

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office: 14-210

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>M 1:10 – 2:00pm</td>
<td>14-232B</td>
</tr>
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<table>
<thead>
<tr>
<th>Office Hours</th>
<th>When</th>
<th>Where</th>
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<tbody>
<tr>
<td>Monday</td>
<td>2:10 - 3:00pm</td>
<td>14-210</td>
</tr>
<tr>
<td>Wednesday</td>
<td>2:10pm - 3:00pm</td>
<td>14-210</td>
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<tr>
<td>Friday</td>
<td>8:30am - 10:00am</td>
<td>14-210</td>
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Description

This is a 1-hour graduate seminar designed to aid M.S. students in conducting their research and preparing and delivering their thesis document.

The main course objectives are:

- 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.

Textbook, Readings

The class does not have an official textbook.
Topics

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1.</td>
<td>September 23</td>
<td>Syllabus, introduction</td>
</tr>
<tr>
<td>2.</td>
<td>September 30</td>
<td>M.S. research and thesis</td>
</tr>
<tr>
<td>3.</td>
<td>October 7</td>
<td>Thesis Intro, design, implementation</td>
</tr>
<tr>
<td>4.</td>
<td>October 14</td>
<td>Thesis Validation</td>
</tr>
<tr>
<td>5.</td>
<td>October 21</td>
<td>Thesis critique (discussion)</td>
</tr>
<tr>
<td>6.</td>
<td>October 28</td>
<td>Short Presentations, Validation</td>
</tr>
<tr>
<td>7.</td>
<td>November 4</td>
<td>Related Work</td>
</tr>
<tr>
<td>8.</td>
<td>November 11</td>
<td>Thesis Presentation</td>
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<td>9.</td>
<td>November 18</td>
<td>Thesis Presentation</td>
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<td>10.</td>
<td>December 2</td>
<td>Final Exam: Long Presentation</td>
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<td></td>
<td>December 9</td>
<td>(7:10-10:00am) Final Exam: Long Presentation</td>
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Grading

Your grade will be determined by the quality of the following deliverables:

<table>
<thead>
<tr>
<th>No.</th>
<th>Assignment</th>
<th>Start Date</th>
<th>Due Date</th>
<th>% of course grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thesis reading and critique</td>
<td>March 28</td>
<td>April 25</td>
<td>15%</td>
</tr>
<tr>
<td>2.</td>
<td>Research blurb/Thesis Intro</td>
<td>April 18 (*)</td>
<td>May 2</td>
<td>15%</td>
</tr>
<tr>
<td>3.</td>
<td>Experimental design</td>
<td>May 9</td>
<td>June 10</td>
<td>10%</td>
</tr>
<tr>
<td>4.</td>
<td>Related work</td>
<td>April 4</td>
<td>June 10</td>
<td>20%</td>
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<tr>
<td>5.</td>
<td>Short presentation</td>
<td>April 4</td>
<td>May 2</td>
<td>5%</td>
</tr>
<tr>
<td>6.</td>
<td>Long presentation</td>
<td>May 9</td>
<td>June 10,</td>
<td>30%</td>
</tr>
<tr>
<td>7.</td>
<td>Class participation</td>
<td></td>
<td></td>
<td>5%</td>
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Course Policies

Exams

We will use the final week of classes, and the Final Exams week slot associated with our class (Friday, June 10, 1:10-4:00pm) to have the final course evaluation. Your final evaluation is a long presentation (Assignment 6), a 20 min. presentation of your thesis research topic.

Assignments

The course involves three types of assignments: reading assignments, writing assignments and oral presentations.

Reading Assignments

There will be two key reading assignments in the course:
Thesis reading and critique: you will select a number of M.S. thesis documents from past Cal Poly M.S. in Computer Science students. You will read these documents, and you will prepare and present your assessment/critique of them.

Relevant literature: you will be asked to prepare a bibliography of academic literature relevant to your thesis/research topic. You will then be asked to read a number of papers from your bibliography.

Writing Assignments

The course will have the following writing assignments:

Research Blurb/Thesis Intro: you will write a succinct introduction to your research area. This introduction should provide an overview of the broad research area within which you are conducting your thesis research and should motivate your specific thesis research. As such, this text can be viewed as a draft of your thesis introduction section.

Experimental design: you will come up with a validation framework for your thesis (creative part of the assignment) and present a short write-up describing it (writing part of the assignment). This can eventually become part of the Validation section of your thesis.

Background/Related work writeup: based on your bibliography of related work you will provide a succinct writeup detailing the background information relevant to your thesis research topic. This may later morph into Related Work or Background sections of your thesis.

Oral Presentation Assignments

You will formally deliver two presentations in this course:

Short presentation: A short (up to 5 mins) presentation describing the essence of your thesis research in terms accessible to your peers.

Long(er) presentation: A longer (15-20 mins) presentation describing your thesis research in more technical terms. This may serve as a prototype of your eventual thesis presentation.

Other Assignments

There may be other assignments in the course:

- M.S. Defense attendance. If any M.S. defenses are scheduled this quarter, we will attend them (ideally, I’d want everyone to attend 1-2 defenses).
• **Peer reviews.** Some class activities may involve peer reviews of material produced by others (e.g., past theses) or by other students in the course (e.g., their wiki submissions).

These activities will count under the "Course Participation" line from the grading procedures table above.

**Web Page**
Class web page can be found at

http://www.csc.calpoly.edu/~dekhtyar/590-Sprin2016

Through this page you will be able to access all class handouts including homeworks, project information, reading materials and lecture notes (should the latter be written).

**Wiki**
We will use a CSC 590 Github Wiki in this class for a variety of assignments. All of you will have individual wiki pages, and will upload your work to them. Additionally, you will contribute to the contents of other existing wiki pages.

We will set up the wiki during the first week of classes and you will get access to it by the end of the week.

**Strike**
As you might know, Cal Poly faculty, as well as the faculty at other CSU campuses are represented for the purposes of collective bargaining by California Faculty Association (CFA), an affiliate union of SEIU, American Association of University Professors (AAUP), National Education Association (NEA) and California Teachers Association (CTA).

During the 2015-2016 academic year CFA has engaged in collective bargaining activities with the CSU administration on behalf of the CSU faculty. The CFA has asked for a 5% salary increase for all CSU faculty to help if not offset, then at least somewhat minimize the financial hardships faced by the CSU faculty over the past eight years of no stagnant salaries (complete with a 10% furlough during one of these years).

At present the CFA is at an impasse with the CSU administration regarding the salary negotiations. While this impasse can be resolved at any time, CFA has used its right to call for a concerted action. **As things stand now, CFA has called for a CSU-wide strike to take place during the following days:**

- April 13 — April 15
- April 18 — April 19
We have one class scheduled during the announced strike days: on April 18 (Monday).

If CFA and the CSU administration reach an agreement on faculty salaries, the strike will be called off and our class will take place as usual.

If the agreement is not reached and the strike is on, you should expect the following to happen:

- **No class** on April 18.

- Because the faculty who go on strike must stop all work-related activities, if I join the strike I will not respond to any work-related emails, and in fact, I will be unable to check my calpoly.edu email account. (Please note that April 16 and April 17 are not strike days, so during these two days, I may be able to check email and respond to it).

- Faculty who go on strike will not be present on campus, except for picket lines.

- **You are not on strike** in your capacity as Cal Poly students. What this means is that while I may not be able to hold the classes, there may be assignments that will have to be done by you during the strike days. I promise no due dates for course assignments on any of the strike days, but if the strike takes place, one or more assignments may be issued before the strike commences with due dates after the strike is over. The expectation is that you will spend some of your time during the strike days working on these assignments, even if I am unable to answer the questions you might have about them. (We will try to make sure you have sufficient time to resolve any questions related to these assignments prior to the start of the strike).

- Classes will resume as usual on Wednesday, April 20. Our next class will take place on Monday, April 25.

I understand how disruptive a week-long strike will be on your education and I apologize in advance for the negative impact on your education the strike might have. At the same time, as far as preventing the strike, the ball is squarely in the court of the CSU administration. If you want the CSU administration to know your thoughts concerning the faculty strike, I would like to encourage you to convey those thoughts - either directly, or through Cal Poly administration.

For more information concerning the strike, please see:

http://www.calfac.org/item/faq-cfa-bargaining-possible-strike

and

http://www.calfac.org/strike-411-students
Academic Integrity

University Policies

Cal Poly’s Academic Integrity policies are found at

http://www.academicprograms.calpoly.edu/academicpolicies/Cheating.htm

In particular, these policies define cheating as (684.1)

“...obtaining or attempting to obtain, or aiding another to obtain credit for work, or any improvement in evaluation of performance, by any dishonest or deceptive means. Cheating includes, but is not limited to: lying; copying from another’s test or examination; discussion of answers or questions on an examination or test, unless such discussion is specifically authorized by the instructor; taking or receiving copies of an exam without the permission of the instructor; using or displaying notes, “cheat sheets,” or other information devices inappropriate to the prescribed test conditions; allowing someone other than the officially enrolled student to represent same.”

Plagiarism, per University policies is defined as (684.3)

“... the act of using the ideas or work of another person or persons as if they were one’s own without giving proper credit to the source. Such an act is not plagiarism if it is ascertained that the ideas were arrived through independent reasoning or logic or where the thought or idea is common knowledge. Acknowledgement of an original author or source must be made through appropriate references; i.e., quotation marks, footnotes, or commentary.”

University policies state (684.2): “Cheating requires an “F” course grade and further attendance in the course is prohibited.” (appeal process is also outlined, see the web site above for details.). Plagiarism, per university policies (684.4) can be treated as a form of cheating, although a level of discretion is given to the instructor, allowing the instructor to determine the causes of plagiarism and effect other means of remedy. It is the obligation of the instructor to inform the student that a penalty is being assessed in such cases.

Course Policies

First, all traditional warnings concerning cheating apply in this course. In particular, solicitation of help from people not involved in the course and submission of materials/code etc... not developed by you are absolutely prohibited. Any outside materials used in preparation of homeworks, reports, project assignments must be properly documents. For example, you must properly cite all papers you refer to, all web resources used in preparation. You must also note any open source, off-the-shelf, etc...software or code fragments that you have
incorporated in your solution. If you have questions concerning allowable use of such materials, please consult me in advance.

For example, if an assignment is to design and implement an XML parser, you are supposed to build one from scratch and not use any available parser code (which is plentiful). On the other hand, if you want to use an open-source library, or some code developed by one of the team members prior to the course as part of a project solution, this may qualify as allowable use, if the code is used in support of the main tasks of the project.