

CSC 590: Thesis Seminar

Spring 2019

Course Syllabus

April 3, 2019

Instructor: Alexander Dekhtyar
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office: 14-210

| What | When | Where |
|---------|------------------|---------|
| Lecture | M 9:10 – 10:00am | 14-232B |

Office Hours

| | When | Where |
|---------|-------------------|--------|
| Monday | 8:10 - 10:00am | 14-210 |
| Tuesday | 1:10pm - 2:00pm | 14-210 |
| Friday | 10:00am - 11:00am | 14-210 |

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 reasearch.
- To learn how to present research: orally and in writing.

Textbook, Readings

The class does not have an official textbook.

However, I ask everyone to acquire a copy (any edition) of the following book:

Joseph M. Williams, Joseph Bizup, *Style: Lessons in Clarity and Grace*, Pearson, 13th Ed., 2017, ISBN-13: 978-0-13-408041-3

You will read this book as part of your coursework, and you will use what you learned from it in your writing this quarter.

Topics

| No. | Date | Topic |
|-----|----------|--|
| 1. | April 3 | Syllabus, introduction |
| 2. | April 10 | M.S. research and thesis |
| 3. | April 17 | Thesis Intro, design, implementation |
| 4. | April 24 | Thesis Validation |
| | May 1 | NO CLASS |
| 5. | May 8 | <i>Thesis Critique discussion</i> |
| 6. | May 15 | <i>Short Presentations, Validation</i> |
| 7. | May 22 | Related Work |
| 8. | May 29 | Thesis Presentation |
| 9. | June 5 | Thesis Presentation |
| 10. | June 12 | <i>Final Exam: Long Presentation</i> |

Grading

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

| No. | Assignment | Start Date | Due Date | % of course grade |
|-----|-----------------------------|------------|----------|-------------------|
| 1. | Thesis reading and critique | April 3 | May 8 | 15% |
| 2. | Research blurb/Thesis Intro | April 24 | May 8 | 15% |
| 3. | Experimental design | May 8 | June 5 | 10% |
| 4. | Related work | April 10 | June 10 | 20% |
| 5. | Short presentation | April 10 | May 15 | 5% |
| 6. | Long presentation | May 15 | June 10, | 25% |
| 7. | Class participation | | | 10% |

Course Policies

Exams

We will use the the Final Exams week slot associated with our class (Wednesday, June 12, 7:10-10:00am) 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).
- **Writing Improvement.** Using the techniques suggested in the Williams and Bizup book, improve your writing (or suggest improvements to writing of your peer(s)).

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-Spring2019>

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.,

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.