

Syllabus COMP 680 Seminars in Software Engineering Rev 2.

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Class #: 13783 M 19:00-21:45 Room: JD3520

Office hours: M 15:00-16:15 W 15:00-16:15, email at any time, I will generally respond within 24 hours (excluding weekends and holidays).

Course synopsis: Welcome to the COMP680. This is a research oriented seminars class, different from a typical lecture discussion class. In this class you will study and discuss papers on a variety of topics in Software Engineering. You will join a seminar group of typically of three to four students. Each seminar group will do an in-depth study on a specific topic by reading and analyzing approximately 15 published papers (in journals and conference proceedings) and, **BASED ON THIS RESEARCH**, present a seminar on that topic. Each seminar group will list **THREE VERY CAREFULLY SELECTED** papers for other students to read, do a critical analysis and prepare questions to be asked during the seminar. You will also write a research paper on a topic in software engineering. The research paper can be done individually or in groups of two students. There will be a group project involving a leadership-level software engineering activity. Unlike in previous years, there is no large group software design project.

This syllabus is subject to change. Only the online copy posted in Moodle is current, printed copies may be out of date. You will be notified of all significant changes.

Prerequisites: Comp380/L and Comp322/L or equivalent. Homework and other assignments will rely upon good understanding of prerequisite material covered in typical introductory software engineering classes (e.g. Comp380). It is essential to have adequate skills in reading and writing English; you will be reading good many published papers on software engineering and doing critical analysis on the contents. You will also write comprehensive research paper; good reading and writing skills are essential for these tasks.

Moodle and email: CSUN IT will register you in Moodle automatically (typically 24 hour after adding the class). All course notes, assignments will be posted in Moodle; due dates will be posted in the Moodle calendar. All important class announcements will be posted in the Moodle General forum and all such announcements will be automatically forwarded to your CSUN email address. If you do not use CSUN Webmail, then please set up email forwarding. In all cases, should a conflict arise, the Moodle announcements will take precedence over all other forms of communication.

It is your responsibility to keep up with the class by reading the emails and Moodle posts. Please make sure that your CSUN email account is working and not over quota due to junk mail etc.

<http://www.csun.edu/it/services/emailcal.html#students>

I am happy to answer emails related to procedural questions on Comp680 and also technical questions on topics and issues covered in the course. Typically, my response will be forwarded to all students in class.

If you are looking for the definitions of software engineering terms or explanations of standard SW engineering concepts then I suggest that you look first in any introductory book in software engineering. You can also find useful and accurate information on such issues in Wikipedia or by doing a search on Google. Email me if you still have a question or doubt on the issue(s).

Moodle Profile: Please complete your profile in Moodle. It will help me to know you better if your Moodle profile contains a passport type photo of you. **You will earn participation points by doing so.**

Assignment submission: Please note also that you are expected to submit all assignments; any assignment not submitted will earn NEGATIVE points equal to 50% of the max points for the assignment not submitted. This penalty will also apply when it is clear that the submission is grossly inadequate, e.g., when a submission is made primarily for the purpose of avoiding the non-submission penalty. **The first missed assignment will be excused.**

Assignments designated for Moodle submission are graded within Moodle and cannot be submitted by email or in class; emailing copies to me serve no purpose as I cannot submit these to Moodle on your behalf. All Moodle assignments must be submitted by the due date, Moodle will not accept late submissions even if it is late by only 1 second!! Configuring Moodle to accept late submissions for individual students require a good deal of cumbersome and manual processing, I will undertake to do this only for certified medical reasons and genuine emergencies. Extension requests based on lack of planning your part, or schedule conflict with other classes/ work are not acceptable reasons.

All assignment submissions should be of professional quality; always do a spelling & grammar check before submission.

If an assignment calls for printed submission then please submit it to me in class, not in my office, or in the comp science office. Disorganized and scruffy submissions exhibit a lack of interest and often represent thoughtless work, hastily created at the last minute. Such submissions generally earn grades of C or lower.

Text book: There is no text book for Comp680; you will use online resources for course material; all are free, some require free registration.

ACM & IEEE digital libraries, Safari Technical Books and others CSUN library

<http://library.csun.edu/xerxes/databases/subject/computer-science>

SEIR: <https://seir.sei.cmu.edu/seir/>

SEI: <http://www.sei.cmu.edu/publications/>

Crosstalk repository: <http://www.crosstalkonline.org/>

Handbook of SE & KE. Vols. 1 & 2: <http://www.ksi.edu/seke/hand.html>

Open Seminars in SE, fundamentals & definitions: <http://openseminar.org/se/modules/1/index/screen.do>

UML diagrams: <http://edn.embarcadero.com/article/31863>

WWW Virtual Library Computing & CS: <http://vlib.org/Computing>

Brad Appleton's SE resources: <http://www.cmcrossroads.com/bradapp/links/swe-links.html#SwE>

SWEBOK: <http://www.computer.org/portal/web/swebok/htmlformat>

Google Scholar: <http://scholar.google.com/>

Other assets, as you and I discover them during the semester.

Internet: You will need broadband internet to use the digital libraries and to do other searches. Broadband internet service is freely available in the CSUN library, CS labs, and CSUN Wi-Fi.

Evaluations: You have the opportunity to earn a maximum of 100 points for each assignment. Aggregate class points is the weighted sum of the points earned in the individual assignments ($\sum \text{Assignment point} \cdot \text{Weight}$)

Assignments (Due dates and submission links in Moodle)	Weight
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Two quizzes based on papers read and topics discussed in class. Printed copies of papers can be brought to the quiz, no class notes, no computing devices are allowed.	20%
Research paper. Can be done with a partner; see guidelines in Moodle.	10%
Seminar presentation material, schedule, ball handling (each team member will earn the same points)	10%
Seminar presentation style & question answering (individual)	10%
Seminar questions. See guidelines in Moodle; vague, irrelevant; overly general questions (result of making up questions without reading and understanding the paper contents) score ZERO points.	10%
Class Software Engineering Project	10%
Attendance & participation (no snoozing in class earns credit)	05%
Final Examination. Topics will be announced in class, typically includes questions harvested from seminar contents, selected papers, past quizzes, and other assignments. The final exam will be held on the date and time listed in SOLAR.	25%

Please arrange to take all quizzes and the final exam on the scheduled dates; I will reschedule only for CERTIFIED MEDICAL emergencies.

Letter grades for homework and other assignments have the following values

A+ = 95 to 100% (Excellent and exceptional, earned rarely). A = 90% (excellent), A- = 85% (Very good, nearly excellent); B+ = 80% (Quite good); B = 75% (Good); B- = 70% (Good enough); C+ = 65% (Acceptable); C = 60% (Acceptable); C- = (Acceptable but poor); D+ = 55% (Poor); D = 50% (Poor); D- = 45% (Very poor); F = <45% (Fail)

A sample final class grade scale is shown below, this is for information only. The actual class grade scale is determined by the professor at the end of the semester in which the grade boundaries may slide up or down based on overall class performance: (A 85-100%); (A- 83-84%); (B+ 80-82%); (B 75-79%); (B- 69-74%); (C+ 65-69%); (C 60-64%); (C- 57-59%); (D+ 54-56%); (D 51-53%); (D- 48-50%); F < 48%.

I expect you to perform at a level that will earn at least a B; you do need to work on the coursework to earn that grade. Several students earned B- and lower grades in spring 2010, primarily for failing to submit assignments on time and I suspect, procrastination!

Makeup and extra credit: Not given.

Class etiquette: Please silence all pagers and cell phones before entering classroom. Please, no snoozing in class, because it is disruptive to others. If you snooze in class, out of respect, I will not wake you up, but I will notice. If you are sleepy, you can walk out of the class room, get a drink of water, wake-up and return to class. You can even stand at the back of the room to beat that drowsy feeling!! Read "How to ace my class" in my website. COMP680 is a participatory class, but please avoid private discussions during class sessions; share all

discussions with the whole class in an orderly manner.

Paper reviews: You will read several assigned papers, do critical reviews and participate in class discussions based on the papers. Quizzes and the final will have questions based on the assigned readings AND CLASS DISCUSSIONS.

Research paper: You will write a research paper on a topic listed in Moodle. The research topic must be chosen from this list (avoids submission of the same paper in multiple classes). The research paper may be done individually or in teams of two students. If you are going to collaborate with another then please post the names of the team member in the Moodle postings. Teamwork must be a planned process of collaboration from the beginning. You can break up a team and submit individually, but not form a team after the 3rd week of class. Please see Paper writing guidelines in Moodle.

Seminar Participation: Student seminars will play a major part in the COMP 680. Please see Seminar participation guidelines and sample of good and poor questions in Moodle.

Software Engineering Project: The entire class will participate in a project involving some significant software engineering activity. Such project may involve determining the process requirements for a development activity such as analysis, design, programming and implementation, cost estimation, complexity management, testing , etc. This will be followed by selection, installation, evaluation, and reporting of tools for performing the activity. The class as a whole will be involved in the initial planning; the individual activities will be performed by small groups of students typically 3 to 4 in size.

Attendance and participation: Regular and punctual class attendance and active participation in class discussions are essential to pass this seminars class. If you have a work or family conflict that will not allow you to attend class regularly and do the assignments in a timely manner, then please consider dropping this class now and taking it in future. Please make sure that you sign the attendance sheet that will be circulated in the class from time to time (not in every class and not always at the same time.) If you cannot attend on a particular day, please arrange for a “buddy” to take notes and brief you on return.

Policy on Cheating and Plagiarism: There will be ZERO TOLERANCE against plagiarism and cheating, typically resulting in the F grade for the class. Section entitled “ACADEMIC DISHONESTY” in the CSUN catalog gives definition of plagiarism and cheating; this entire section is included in this syllabus by reference. In this class, the term plagiarism also includes the case where a student submits material for grading that is authored by someone else as his or her own work. Examples of such plagiarized work include term papers, computer programs, design solutions, and answers to questions written by other than the student submitting the work for review and/or grading. Please note that:

- a) Peer review of your work by others is both acceptable and encouraged. Peer review involves reading and commenting of your work by others for the purpose of identifying areas of weakness and excellence. A peer review does not provide solutions or answers. Peer review comments are just that-comments; you should neither seek, nor use any actual solutions or answers that might be provided by the reviewers.
- b) Students can also collaborate in studying the papers for review; however, each student must submit separate and distinct questions.

Any student found cheating or plagiarizing will be assigned the grade F in that assignment. Additionally penalty points equal to 100% of the maximum points for the assignment in which cheating or plagiarism was attempted or discovered will be assigned. For example, if the assignment contributed 10 points to the total class points,

then 10 points will be deducted from the total class points. The student will not be given an opportunity to resubmit the assignment or retake the quiz/exam.