CPE 564 Syllabus 2.0

Spring 2016

Instructor Information

Sections:	01, 02
Instructor:	John Bellardo
Student Assistant(s):	none
Email Address:	bellardo@calpoly.edu
Callsign:	KK6HIT
iMessage Screenname:	johnbellardo
Office:	14-227
Phone:	(805) 756-7256
Course Website:	https://www.csc.calpoly.edu/∼bellardo/courses/564
Office Hours:	Tu + Th: 0900-0930; W: 1010-1100

Office hours are guaranteed until the earlier of the posted end time or the time at which there are no more students. I am typically in my office outside of my published office hours. Feel free to stop by and talk with me. If the door is closed, please knock. The majority of the time I'll be available to assist you immediately, however there may be some instances where another task is higher priority. If that is the case I'll tell you, and I appreciate your understanding. If necessary we can also set up an appointment outside of the normal office hours to meet.

I will also respond to email, however I do receive a large quantity over the quarter and I tend to fall behind. There may be a few day lag before you receive a response. You can also contact me via AIM using the handle listed above. I will occasionally send announcements to the course mailing list. These announcements get delivered to your @calpoly.edu email address. It is your responsibility to ensure you regularly check that email account. You can always configure the account to forward all email to an off-campus account.

Course Objectives

1. Gain a better understanding of network design, research topics, and research methodologies.
2. Refine your ability to critically evaluate other research.
3. Further develop your skills as a researcher, including the necessary ability to build infrastructure.
4. Practice oral and written communication skills.

Prerequisites

CSC/CPE 464 (or equivalent) or consent of instructor.

Readings and Course Material

All of the required course readings are research papers I have made available through the course web site. You are required to read and evaluate (see Paper Evaluations section) each assigned paper *before* class. There will typically be two papers assigned for each lecture, however there may be fewer upon occasion.

All course material, including an electronic version of this syllabus, course reading list, supplemental program files, and your grades, are available through the course web site:

`https://www.csc.calpoly.edu/$\sim$bellardo/courses/564`

Use your Cal Poly Portal username and password to access the site.

Handouts

Periodically, handouts may be passed out to cover additional material or provide examples. If you miss a class and the handout(s) are not available online, it is your responsibility to obtain a copy from a fellow student. I will not have extra copies of the handouts in my office.

Assignment Weights

I reserve the right to change these weights at any time

Assignment	Weight
Project	60%
Project White paper	
Project Presentation	
Class Participation	40%
Attendance	
Paper Reviews	
Presentation(s)	
Class Discussion	
Total:	100%

Any regrade requests must be submitted within one week of the graded assignment being returned.

Midterm and Final

I do not plan on having any written exams this quarter, however I reserve the right to add quizzes, midterms, and a final if class participation is poor, paper evaluations are consistently bad, or I deem students are not putting a sufficient amount of effort into the course.

Attendance

Attendance is an important part of this course. Two *unexcused* absences will lower your final grade one letter. Three or more will result in an automatic F.

Paper Reviews

You must individually review each assigned paper before class. A template has been provided for you on the course website. I will talk about the form and my expectations on the first day of class. You will be submitting your reviews electronically via handin. Instructions are available on the same webpage as the review template. You also need to bring a copy of your review to class so you can better participate in that day's discussion. Due to the nature of the course a late review serves no practical purpose.

Reviews are worth 10 points each. They are scored using an advanced value-prediction algorithm. Your get 2 points for submitting your paper rating and 8 for the review, regardless of the content. I'll read your reviews and email you feedback after the score has been recorded in the grade database. If you don't receive any additional email from me then I had no additional feedback to give you. Since the predicted score may be wrong in some cases, I may change your score ex post facto. You will always receive and email in this case (it may just be automated or it may be one I compose myself).

You will be reviewing 30 papers this quarter, for a total of 300 points. You are required to get 270 review points to be eligible for an A and 245 for a B. Review scores lower than 245 will most likely result in an F. This scheme provides you flexibility to either skip a few reviews, assuming you submit consistently good reviews. You can view your current review score online.

Paper Presentation and Discussions

You are required to present one paper to the whole class. The presentation must include a set of slides and be at least 25 minutes in length. You will need to become an "expert" on the particular paper you present, so it will take more time than a normal paper. If you have an interest in a particular topic area please contact me during the first week of class so I can pair your with a paper you might enjoy more. It is permitted to reuse the slides the original author of the paper created for the conference publication.

You may also be required to lead a paper discussion in class (exact number depends on final course enrollment). This is much less formal than a presentation. You will not be responsible for both a presentation and discussion on the same day, unless you explicitly request it.

I will assign paper and discussion slots for the early part of the quarter by Thursday. Let me know if you have a paper preference. Conflicts are resolved on a FIFO basis using email timestamps.

Project

You will spend most of the quarter working on a term project of your choice. The project must have a strong networking component. Historically CSC 564 has taken a broad view of "networking", and I don't intend to change that. A list of sub-topics that are included under the networking umbrella are: Network protocols, Operating Systems, Architecture (some), and Security (some). The project can overlap with other projects you are working on (*e.g.*, thesis, senior project), assuming that project otherwise meets the course requirements. If you are having difficulty coming up with a project idea I can brainstorm with you.

I expect you to work in groups of 4 students on the project. I may make exceptions depending on the nature of the project.

Your project must include an implementation component. In addition to a traditional implementation, other non-standard implementation components include data analysis and system measurement, assuming there is "real" coding involved.

There will be three deliverables for your project. A project proposal, a final presentation, and a white paper. All four of these requirements factor into your final project score.

Project Proposal

You are required to present a formal project proposal in front of the class during the third week of the quarter. The proposal will be roughly 15 minutes long, with time for feedback from the class. It must specify the goals and projected results of the project. You must provide me with a hardcopy of your slides before the presentation, and an electronic copy via email shortly thereafter.

The proposal is done in the fourth week to give you the opportunity to think about your project idea. If you need help with ideas see me.

Final Presentation

You are required to give a formal project final presentation during our scheduled final timeslot. This presentation will be 25-30 minutes long and recap your goals, present your methodology, and your results. You must provide me with a PDF version of your slides before the presentation.

Project White paper

You are required to submit a project white paper on or before the Friday of finals week. The white paper should cover the same material as your presentation, but go into more depth of analysis and explanation. It must be 8-20 conference formatted (two column, single space, small margins, 9pt- font, full bibliography, abstract, introduction, etc) pages. See papers from the SIGCOMM conference for an example of this formatting.

Plagiarism and Cheating

Cooperative work is an important part of learning; you are encouraged to study together, discuss the lectures, laboratory concepts and computer network issues. However, it is cheating to turn in duplicate code (even one small function or comment), and it is cheating to copy work (even one line) from another student's assignment or file. It is cheating to copy work (even one line) from a published source. It is cheating to lend another student your assignment. It is cheating to write part (even one line) of another student's assignment. It is cheating to take the work of someone else, modify it to appear to be different, and submit it as your own. It is cheating to receive any assistance from any other person (except from me and any special permission that I give you) during an evaluation period. Any attempt at deception (such as resubmitting a program assignment n as program assignment $n + 1$) is considered cheating. It is cheating to make any statement, written or verbal, that is known to be incorrect. It is cheating to knowingly or unknowingly enable someone else to cheat (*e.g.*, leaving your assignment files world readable). You may not submit work that you and another student completed with another person(s) in another course. During a test, if you look at the work of another student, have a device on your desk that has access outside the classroom, or it is determined that your work could not have been done independently, it will be determined that you have cheated. You are responsible for your program code and if someone uses your code during this class or in the future, you will be held equally responsible for the cheating. **If you cheat or your work is similar to that of another student(s), you will receive a course grade of F and a letter will be sent to the campus Judicial Affairs Office requesting that you be suspended if it was the first offense and dismissed if there has been a prior occurrence.**

Sensitive communication via email

I generally do not discuss grades or course standing questions over email because emails are easily forged and are generally insecure. However, I am willing to discuss such matters if proper email encryption is used. This requires an out-of-band key exchange. If you are interested in this see me after class or during office hours.

Disclaimer

This syllabus is a forward looking document. It conveys my expectations for this course as of the start of the quarter. It is not a contract. I reserve the right to make minor and/or major changes to all aspects of this syllabus and this course as I see fit.