

CSC493

Software Project

Spring 2019

3 units

Point Loma Nazarene University
College of Natural and Social Sciences

PLNU Mission

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Instructor:

Dr. Benjamin Mood
bmood@pointloma.edu
619 849 2269
Rohr Science 216

Meeting Times and Locations:

8:00 – 9:30 T/R - BAC 155

Office Hours:

Monday: 11:00 – 12:00 (caf), 12:00 – 1:30 (office)
Tuesday: 9:45 – 10:45 (office), 12:45 – 2:45 (office)
Wednesday: 11:00 – 12:00 (caf), 12:00 – 1:30 (office)
Thursday: 9:45 – 10:45 (office), 2:45 – 3:45 (office)

Books:

None!

Course Description:

This course presents the student with a strong experience in software engineering. Students, working in teams, investigate, design, implement and present to their classmates a significant software project. The project should solve a significant, complex and generalizable problem, dealing with constraints and trade-offs in the solution. The course includes study of project management concerns such as planning, scheduling, and assessing progress.

Learning Outcomes:

Students will be able to write correct and robust software.

Students will analyze the interaction between hardware and software.

Students will be able to apply their technical knowledge to solve problems.

Students will be able to speak about their work with precision, clarity and organization.

Students will be able to write about their work with precision, clarity and organization.

Students will collaborate effectively in teams.

Students will be able to gather relevant information, examine information and form a conclusion based on that information.

Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats.

Department Mission:

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

Additional Course Information:

Projects and Reports: Students will complete projects throughout the semester. Students will demo their completed projects in class. Group leaders will turn in a report of what happened on the project each week (due each Tuesday a project is not starting or ending). Group members will inform the leader, the leader will compile the information and send it to me. The first report for each project will be a list of the user stories / tasks and who is responsible for them. Each report will include who has worked on what and for however many hours they have worked. Groups may change after each project. Groups who have teammate issues should speak with Dr. Mood.

The Fire Clause: This class is supposed to simulate the real world. If, due to a lack of work or lack of correct work, two team members vote to fire the other team member, the team will be split into two groups. The group of two will continue to work on the project (slightly reduced in size). The group of one will have a project, which is larger than 1/3, but not the entire project. The deadline will not change. A situation where two team members do not work on the project and one works on the project by themselves will operate in a similar manner.

Missed Classes: Homework missed due to PLNU activities (i.e., sports teams, choirs, etc), can be turned in the day after the student is back. Missed exams due to emergencies can be made up once the dean of students informs Dr. Mood that PLNU has approved the reason. Non-emergency missed exams will result in a zero. It is the student's responsibility to inform the professor of when they will be gone. Missed class activities, which are due to a non-dean of students approved-emergency situation, will result in a zero. Late work will not be accepted except in the aforementioned conditions.

Cheating: If you use online resources, you must site the direct URLs in the labs you turn in. You should not copy another student's work. Copying code from another student (who is not on your team) is not allowed. Do not copy a completed (or nearly completed) project from online.

Rule of thumb: everything you turn in you should be able to completely explain. Meaning, if I call you into my office to explain your work, you should be able to.

Cell Phones & Laptops: Please don't use them in class unless we are doing a demonstration or asked to use them. An occasional peek is OK, but ignoring what is going on in class is not.

Grading:

Projects: 100%

Grading scale

| | |
|-----------|----|
| 93 – 100% | A |
| 90 – 92% | A- |
| 87 – 89% | B+ |
| 83 – 86% | B |
| 80 – 82% | B- |
| 77 – 79% | C+ |
| 73 – 76% | C |
| 70 – 72% | C- |
| 67 – 69% | D+ |
| 63 – 67% | D |
| 60 – 62% | D- |
| 0 – 59% | F |

PLNU Policies

Attendance:

Attendance is expected at each class session. In the event of an absence you are responsible for the material covered in class and the assignments given that day.

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See the Undergraduate Academic Catalog [Class Attendance](#).

Class Enrollment:

It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

Academic Accommodations:

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments,

modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

Academic Honesty:

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See [Academic Honesty](#) for definitions of kinds of academic dishonesty and for further policy information.

Final Exam:

The final exam date and time is set by the university at the beginning of the semester and may not be changed by the instructor. This schedule can be found on the university website and in the course calendar. No requests for early examinations will be approved. Only in the case that a student is required to take three exams during the same day of finals week, is an instructor authorized to consider changing the exam date and time for that particular student.

Copyright Protected Materials:

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

Credit Hour:

In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 3-unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirements can be provided upon request.

Approximate Schedule

| Monday | Tuesday | Wednesday | Thu | Friday |
|-------------------------|-------------------------------------|-----------|------------------------|-------------------------|
| Jan: 7 | 8: | 9: | 10: Groups | 11 |
| 14 | 15 Project 1 Start | 16 | 17 | 18 |
| 21 (no classes) | 22 report due by 5pm | 23 | 24 | 25 |
| 28 | 29 report due by 5pm | 30 | 31 | Feb 1 |
| 4 | 5 report due by 5pm | 6 | 7 | 8 |
| 11 | 12 report due by 5pm | 13 | 14 | 15 |
| 18 | 19. Project 1 End / Project 2 Start | 20 | 21 | 22 |
| 25 | 26 report due by 5pm | 27 | 28 | 1 |
| 4 (spring break) | 5 | 6 | 7 | 8 (spring break) |
| 11 | 12 report due by 5pm | 13 | 14 | 15 |
| 18 | 19 report due by 5pm | 20 | 21 | 22 |
| 25 | 26 Project 2 End / Project 3 Start | 27 | 28 | 29 |
| 1 | 2 report due by 5pm | 3 | 4 | 5 |
| 8 | 9 report due by 5pm | 10 | 11 | 12 |
| 15 | 16 report due by 5pm | 17 | 18 Easter Break | 19 Easter Break |
| 22 Easter Break | 23 report due by 5pm | 24 | 25 | 27 |
| 29 | 30 Project 3 end | May 1 | 2 | 3 |