

Mathematical, Information and Computer Sciences

CSC4133/ISS4133/MTH4133; Service Learning

3 Units

Fall 2022 MW 2:45- 3:55

Meetings: Mondays and Wednesdays, 2:45-3:55	Instructor: Dr. Catherine Crockett
Location: RS 365	Phone: 619.849.2723
Final Exam: 12/14, 1:30-4:00	Email: catherinecrockett.pointloma.edu
Poster session: TBA	Office hours: MWF 11-12, MW 1-2, Tue, Thurs 9-11, either in-person or by Zoom
More assignment information in Canvas	Office: RS 222

## **PLNU Mission**

## To Teach ~ To Shape ~ To Send

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.

#### **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.

#### **COURSE DESCRIPTION**

Students working in teams design and implement a project using a broad spectrum of computer science, mathematics, and/or natural science knowledge to meet the needs of a community organization or the university.

## **COURSE LEARNING OUTCOMES**

- 1. Students will be able to apply their technical knowledge to solve problems.
- 2. Students will be able to speak about their work with precision, clarity and organization.
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- 4. Students will collaborate effectively in teams.
- 5. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- 6. Students will be able to gather relevant information, examine information and form a conclusion based on that information.
- 7. 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.

## **REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES**

There are no texts for this class.

## **COURSE CREDIT HOUR INFORMATION**

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 sixteen weeks. Specific details about how the class meets the credit hour requirement can be provided upon request. (Based on 37.5 hours of student engagement per credit hour.)

Category	Time Expectation in Hours
Team Meetings	14
Class Meetings	21.75
Client Meetings	4

#### **Distribution of Student Learning Hours**

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Category	Time Expectation in Hours
Presentations	12.25
Work on Project/Paper Writing	60.5
Total Hours	112

## ASSESSMENT AND GRADING

## **Graded Components**

- **Skills presentation:** This is expected to be a group grade as presentations will be made in groups of 2-3. However, if 1 person is missing, or does not speak, that individual will likely receive the maximum deduction. Presentation should cover material requested by professor. Presentation is expected to be 15-20 minutes, and should include a 5 minute exercise for the class to complete.
- Ethics presentation: Our work is not just about what we do, but how we do it, keeping in mind how it will affect society. Each student will be required to lead a discussion based on an ethics-based paper. The student should have thoroughly read and contemplated the paper and prepared a brief synopsis along with 3-4 discussion questions for class consideration based on that paper. Please feel free to include any insights that the Bible presents on the general topic. Presentations typically made on Mondays.
- **Group presentations:** This is a group grade. However, if 1 person is missing, or does not speak, that individual will receive the maximum deduction and this will not affect the rest of the group. Progress on project will be judged by your presentation, and failure to show adequate progress on your project can result in huge deductions especially on the final presentation during the final exam time. Your final exam will be a group presentation. The final exam is Wednesday at 1:00
- Weekly progress reports: A recounting of what you, as an individual, completed towards the project. Points can be re-gained in this category if dramatic contribution was made the week after points were missed. Most Fridays are work days (no formal class meeting) so good progress is expected by Monday. (These Fridays also work for client meetings)
- **Poster:** Your poster will be presented to a wide audience. The expected presentation date is Monday, November 9. The poster as a whole is a group grade for 10 points. The exception is that an absence for the presentation is an automatic deduction of 10 for the individual. This does not affect the group.
- **Elevator speech:** The elevator speech shows that in individual is familiar enough with the project to present an interesting summary in 30-60 seconds. This is an individual grade and will be developed in anticipation of the poster presentation.
- **Peer evaluations:** Are expected to be honest assessments of the contribution of your team member. Points will be deducted from the evaluation that you complete if

the professor believes that the evaluation is not a true representation of reality (in other words, that you are just trying to be nice to a friend).

- **Project Paper:** The project paper is an individual grade. It will be based on the individual sections being turned in and revised as requested. Credit is not given if the sections are not turned in on time. Points may also be deducted if you are absent on a day when peer reviews take place or if the final quality of the paper is poor.
- **Group assignments:** Group assignments may include, but are not limited to, development of the problem statement and management plans, client meetings, client approvals, poster draft, and reflections.
- **Final Examination**. No examination shall be missed without prior consent or a welldocumented emergency beyond your control. A score of zero will be assigned for an examination that is missed without prior consent or a well-documented emergency beyond your control.
- Late work will not be accepted without prior consent or a well-documented emergency. Up to a maximum of one homework assignment will be accepted up to 3 days late provided that consent is received from the professor before it is due. Homework assignments that are submitted late without prior consent will be recorded with a score of zero. If more than half of the homework assignments are submitted on time, then the lowest homework score will be dropped from the calculations of the homework grade.
- The examination schedule is included in the daily schedule. This instructor does not intend to accept excuses such as poor communication with parents, benefactors, surf team sponsors and/or travel agents.

Task	Possible points	Point deductions
Skills Presentation	10	10 if missed by presenter, up to 10 if inadequate or absent
Ethics Presentation	5	Up to 5 for poor or missed ethics presentation
Group Presentations	15	5 for mid-semester presentation and 10 for final presentation
Weekly Progress Reports	15	2 for each time sufficient progress was not made that week
Poster/Presentation	10	10 for presentation absence, up to 10 for poor poster
Elevator Speech	5	Up to 5 for poor elevator speech
Peer/Mentor Evaluations	10	Up to 5 points for less than stellar evaluation, or a missing eval

Project Paper	20	Up to 20 for poor content and quality -4 for a missing section
Group Assignments (written, meetings, reflections, etc)	10	5 for missing assignment or not contributing to assignment (in-class or out)
Total	100	

#### **Grading Scale**

Grades are based on the number of points accumulated throughout the course Approximate minimal percentages required to obtain a given grade are:

Standard Grade Scale Based on Percentages					
	А	В	с	D	F
+		87.5-90	77.5-80	67.5-70	
	92.5 -100	82.5-87.5	72.5-77.5	62.5 -67.5	0-60
_	90-92.5	80-82.5	70-72.5	60-62.5	

# STATE AUTHORIZATION

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on <u>State Authorization</u> to view which states allow online (distance education) outside of California.

## INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

# PLNU COPYRIGHT POLICY

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.

## **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.

## PLNU ACADEMIC HONESTY POLICY

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 <u>Academic PoliciesLinks to an external site</u>. for definitions of kinds of academic dishonesty and for further policy information.

# PLNU ACADEMIC ACCOMMODATIONS POLICY

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course and/or if they do not wish to utilize some or all of the elements of their AP in that course.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.

## PLNU ATTENDANCE AND PARTICIPATION POLICY

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 <u>Academic PoliciesLinks to an external site.</u> for further information about class attendance.

#### 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 th 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.

#### SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith. If students have questions, a desire to meet with the chaplain or have prayer requests you can contact the <u>Office of Spiritual Development Links to an external site.</u>

Week	Monday	Wednesday	What's due
1	8/29 (Tuesday) Introduction to the class Discuss projects Sign-ups for projects	8/31 Discuss first client meeting Email the client. Sign up for skills presentations	GA: Problem Statement & Plan for Client meeting Week 1: Progress Report
2	9/5 No class	9/7 Report on first client meeting Discuss ethics presentations Discuss scheduling project	GA: First Client meeting Report Week 2: Progress Report
3	9/12 Skills presentation #1 Gantt Chart Discussion	9/14 Skills presentation #2	GA: Gantt Chart Week 3: Progress Report
4	9/19 Skills Presentation #3 Skills Presentation #4	9/21 Discussion on Technical writing	GA: Second Client Meeting Week 4: Progress Report (Paper) Draft Abstract
5	9/26 Peer Review of Abstract Skills presentation #5	9/28 Report on Second meeting	Week 5: Progress Report (Paper)Final Abstract (Paper) Draft of Introduction
6	10/3 Ethics Presentation#1 Peer Review Introduction	10/5 Plan group presentations	Week 6: Progress Report (Paper) Final Introduction
7	10/10 Ethics presentation #2	10/12 Mid semester presentations All groups	Week 7: Progress Report (Paper) Draft of Methods Section
8	10/17 Ethics Presentation#3 Peer Review Methods Section	10/19 Poster discussion	GA: Third client meeting Week 8: Progress Report (Paper) Final Methods Section

9	10/24	10/26	
	Ethics Presentation #4	Report on Client meeting	Week 9: Progress Report
	Ethics Presentation #5		(Poster)Draft of poster
			(Paper)Draft of Results sections
10	10/31	11/2	
	Ethics Presentation #6		Week 10: Progress Report
	Peer Review Results		(Paper)Final Results Section
11	11/7	11/9	
	Ethics Presentation #7	Elevator Speech	Week 11: Progress Report
12	11/14	11/16	
	Ethics Presentation #8	Working groups	Week 12: Progress Report
	Ethics Presentation #9		(Paper) Draft Paper Conclusion
13	11/21	11/23	
	Peer Review Conclusion	No class	
	(Paper)	Thanksgiving	
	Ethics Presentation #10		
14	11/28	11/30	
	Ethics presentation #11	Poster presentations	Week 14: Progress Report
		ТВА	(Paper) Final Paper Conclusion
15	12/5	12/7	
	Working Groups	Final Client Meeting	GA: Final Client Meeting
			Week 15: Progress Report
			(Paper)Final paper due
Finals	12/12	12/14	
		Final Presentations	Final Peer Evaluations
		1:30- 4:00	