

CSC/ISS/MTH496 Service Learning Fall 2015

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Course Objective:

Provide a service for a non profit organization while getting real-world experience in interdisciplinary teams using skills gained from Mathematics, Computer Science, Computational Science and Information Systems education. Start working on Senior Seminar presentations for next semester.

Course Learning Outcomes:

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 identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.

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.

Course Organization:

This class will not be like most other courses you have taken. It will be broken down into formal in-class time, and more flexible group time. Both are essential, and required.

Class time will be used for:

- Technical and soft skill presentations
- Team meetings
- Giving and listening to progress reports
- Reflections and peer evaluations

Time outside of class (3-4 hours per week) will be spent:

- Meeting with client/ mentor
- Researching and Planning project
- Learning technical tools
- Implementing project
- Planning briefs and presentations

Anticipated technical/ soft skill presentations:

- Graphing and statistics in Excel
- Graphing and statistics in R
- Building a DB in Access, querying in Access
- Building a DB in MySQL, querying in MySQL
- Gantt charts
- Python presentation
- DNA, Genes, sequencing, FASTA format
- Mass spec data
- Local and global sequence alignment, including BLAST
- BioPython

Pay attention to what is on the rubric!

Grading:

This class is taken for credit only. The determination of whether an individual receives credit for the class is based on progress as determined by the professor and peers.

- Progress on project
- Progress on presentations
- Progress on working as a group member (making meetings, performing assigned tasks, supporting your team members)

Unless you have a serious documented illness, not feeling well is not an acceptable excuse for missing class or an outside meeting. I will meet with you each individually a few times throughout the semester to discuss your progress.

The class is graded on the three strikes policy: 3 strikes and you will receive an F. A strike may consist of any of the following:

- Missing a class or team meeting (everyone will be allowed one free absence that does not count as a strike).
- Showing up late to 2 classes.
- Insufficient progress on your team project.
- Unsatisfactory contribution to the project.
- Unsatisfactory assignment submission.
- Etc... This class will partially depend on who is in class and what areas we need the most growth, hence some assignments will be developed as the course goes.

Attendance:

Attendance is expected at each required 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 in which a student is registered is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements to be met. There are no allowed or excused absences except as approved in writing by the Provost for specific students participating in certain university-sanctioned activities. Excused absences still count toward the 10%-20% limits, but allow students to make up work, quizzes, or tests missed as a result of a university-sanctioned activity. Activities of a unique nature, such as labs or other activities identified clearly on the syllabus, cannot be made up except in rare instances when instructors have given advanced, written approval for doing so. Whenever the number of accumulated absences in a class, for any cause, exceeds ten (10) percent of the total number of class meetings, the faculty member should send an e-mail to the student and the Vice Provost for Academic Administration (VPAA) warning of attendance jeopardy. If more than twenty (20) percent of the total number of class meetings is reported as missed, the faculty member or VPAA may initiate the student's de-enrollment from the course without

further advanced notice to the student. If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of W or WF consistent with university policy in the Grading section of the catalog. There are no refunds for courses where a de-enrollment was processed. For more details see the PLNU catalog:

http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#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 academic standards for completion of their courses as established by the instructors, students with special needs may require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file documentation with the Disability Resource Center (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center contacts the student's instructors and provides written recommendations for reasonable and appropriate accommodations to meet the individual needs of the student. This policy assists the university in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with special needs and guarantees all qualified students equal access to the benefits of PLNU programs and activities. For more details see the PLNU catalog:

http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#Academic_Accommodations

Students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class.

Academic Honesty:

The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose. Violations of academic honesty include cheating, plagiarism, falsification, aiding academic dishonesty, and malicious interference. The details of PLNU's meaning of each of these words can be found in the PLNU catalog at:

http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#Academic_Honesty

A student remains responsible for the academic honesty of work submitted in PLNU courses and the consequences of academic dishonesty beyond receipt of the final grade in the class and beyond the awarding of the diploma. Ignorance of these catalog policies will not be considered a valid excuse or defense. Students may not withdraw from a course as a response to a consequence.

A student who is caught cheating on any item of work will receive a zero on that item and may receive an "F" for the semester. See the PLNU Catalog for a further explanation of the PLNU procedures for academic dishonesty

(http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#Academic_Honesty).

Final Exam: Date and Time

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. 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 change the exam date and time for that particular student.

Copyright Protected Materials

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