Syllabus

Point Loma Nazarene University CSC 4012 Topics in Computer Science - Cloud Computing 2 Units Spring 2021 | Session 1 | Mar 1 - Jun 11

Rohr Science 365 (and on Zoom) T/TH 11:00am -12:15pm

Instructor: Dr. Mike Leih, Ph.D.

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Office hours: By Appointment in Zoom

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

Study of an area of computer science not otherwise included in the curriculum. Topics are determined by the needs and interest of the students and faculty involved.

COURSE LEARNING OUTCOMES -

- 1. Students will be able to explain basic networking protocols, IP addressing and subnetting.
- 2. Students will be able to select an appropriate cloud computing model and technology for a given situations.
- 3. Students will be able to explain the differences and advantages of various cloud technologies.
- 4. Students will be able work through the AWS services and leverage services to meet specific objectives.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Information Technology Project Management, 5th Edition

CompTiA Cloud+ Study Guide, 2nd Edition

Montgovery, Todd and Olson, Stephen

ISBN: 978-1-119-44305-6

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 2 unit class delivered over fifteen 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.)

Distribution of Student Learning Hours

Category	Time Expectation in Hours
Reading and Online Quizzes	18
In-Class Meetings and Exams	30
Cloud Labs	22
Exploration Lab	6
Total Hours	76

ASSESSMENT AND GRADING

Graded Components

- **Reading:** The assigned reading each week should be completed before class. Lecture, class discussion and class activities will be based on the assumption that the reading has been completed before other weekly activities are done.
- **Chapter Reading Quizzes:** Chapter quizzes are open book and will focus on having read and understood the reading assignment. Chapter quizzes will be taken online using Canvas before class and will be available 5 days before they are due. Each quiz will have 10 questions and students will have 8 minutes to complete the quiz. Students will have 2 attempts at each quiz and the last quiz attempt score will be kept. Honorlock is used, so students must use the Chrome browser with Honorlock extension. Missed quizzes will receive zero points and there will be no make-up for missed quizzes.
- **Chapter Questions:** After reading a given chapter, students should submit one or more questions they have regarding the chapter before 6 am on Tuesday or they can respond to a question (with sufficient explanation) to a question that was already posted. Questions posted Questions posted after the due date will receive zero points.
- **Class Participation**: Students are expected to come to class for each class session and activity participate in the class by asking questions, responding to questions and participating in class activities. 120 participation points will be divided through out the semester. Students can miss up to four class session with no deduction from participation points, but after the four miss, each missed class or class were the student did not actively participate in class will have a point deduction.
- **Exploration Lab**: Each student will develop an activity lab on a unique cloud technology topic. The lab will be something that other students could complete to gain some hands on experience and understanding on a cloud topic not covered in class. Student will develop the activity lab and present their lab during the final few weeks of class.
- **Cloud Labs**: Each week a hands on lab will be provided to help students gain practical understanding on using and managing cloud technologies.

- **Final Exam**: A final exam will be given in class in two parts, a closed book multiple choice exam and an open book practical exam. The final exam will cover all material throughout the course. The closed book exam will include multiple choice, short answer, and problem solving questions. The open book exam will cover material completed in the weekly Cloud Lab assignments. If you will miss the exam for a school function, you must arrange to take it in advance. If you ever miss an exam without giving the instructor prior notice, there is a good chance you will receive a zero unless, of course, there was clearly an emergency. The final exam will require the use of the Chrome browser and the Honorlock Chrome extension. You will need to use a computer with a working webcam and microphone and consent to be recorded during the exam.
- 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. 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.

Activity	Points	Percent
Participation	120	12%
Weekly Questions Posts	55	6%
Weekly Labs	330	33%
Weekly Quizzes	110	11%
Exploration Lab	125	13%
Final	260	26%
Total	1000	100%

Point Distribution

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					
	Α	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	

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by their respective due dates / times. Reading quizzes, chapter question posts, and the final exploration lab assignment will not be accepted late. Other assignment may be accepted late with a point deduction penalty for each day late (see assignment for details).

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.

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

PLNU ACADEMIC ACCOMMODATIONS POLICY

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.

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

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>.

Date	Activity	
Mon Mar 1, 2021	Page Course Orientation	
	Page Week 1: Overview and Reading Assignment	
Mon Mar 8, 2021	Page Week 2: Overview and Reading Assignment	
Tue Mar 9, 2021	Assignment Cloud Lab 1	
	Assignment IP Addressing and Subnetting - Due Tuesday 6 am	
	Assignment IP Addressing and Subnetting Quiz	
Mon Mar 15, 2021	Page Week 3: Overview and Reading Assignment	
Tue Mar 16, 2021	Assignment Chapter 01 Question - Due Tuesday 6 am	
	Assignment Cloud Lab 2	
	Assignment Chapter 01 Quiz	
Mon Mar 22, 2021	Page Week 4: Overview and Reading Assignment	
Tue Mar 23, 2021	Assignment Chapter 02 Question - Due Tuesday 6 am	
	Assignment Cloud Lab 3	
	Assignment Chapter 02 Quiz	
Mon Mar 29, 2021	Page Week 5: Overview and Reading Assignment	
Tue Mar 30, 2021	Assignment Chapter 03 Question - Due Tuesday 6 am	
	Assignment Cloud Lab 4	
	Assignment Chapter 03 Quiz	
Mon Apr 5, 2021	Page Week 6: Overview and Reading Assignment	
Tue Apr 6, 2021	Assignment Chapter 04 Question - Due Tuesday 6 am	
	Assignment Cloud Lab 5	
	Assignment Chapter 04 Quiz	
Mon Apr 12, 2021	Page Week 7: Overview and Reading Assignment	
Tue Apr 13, 2021	Assignment Chapter 05 Question - Due Tuesday 6 am	
	Assignment Cloud Lab 6	
	Assignment Chapter 05 Quiz	
Mon Apr 19, 2021	Page Week 8: Overview and Reading Assignment	
Tue Apr 20, 2021	Assignment Chapter 06 Question - Due Tuesday 6 am	
	Assignment Cloud Lab 7	
	Assignment Chapter 06 Quiz	
Mon Apr 26, 2021	Page Week 9: Overview and Reading Assignment	
Tue Apr 27, 2021	Assignment Chapter 07 Question - Due Tuesday 6 am	
	Assignment Cloud Lab 8	

Course Schedule

	Assignment Exploration Lab Abstract		
	Assignment Chapter 07 Quiz		
Mon May 3, 2021	Page Week 10: Overview and Reading Assignment		
Tue May 4, 2021	Assignment Chapter 08 Question - Due Tuesday 6 am		
	Assignment Cloud Lab 9		
	Assignment Chapter 08 Quiz		
Mon May 10, 2021	Page Week 11: Overview and Reading Assignment		
Tue May 11, 2021	Assignment Chapter 09 Question - Due Tuesday 6 am		
	Assignment Cloud Lab 10		
	Assignment Exploration Lab Draft		
	Assignment Chapter 09 Quiz		
Mon May 17, 2021	Page Week 12: Overview and Reading Assignment		
Tue May 18, 2021	Assignment Chapter 10 Question - Due Tuesday 6 am		
	Assignment Cloud Lab 11		
	Assignment Chapter 10 Quiz		
Mon May 24, 2021	Page Week 13: Overview and Reading Assignment		
Tue May 25, 2021	Assignment Exploration Lab Final		
	Assignment Exploration Lab Presentation		
Mon May 31, 2021	Page Week 14: Overview and Reading Assignment		
	Assignment Official Course Evaluation		
Mon Jun 7, 2021	Page Week 15: Overview - Final exam		
Tue Jun 8, 2021	Assignment Final Exam Part 1 - Closed Book		
	Assignment Final Exam Part 2 - Open Book		