Point Loma Nazarene University
CSC 154: Object Oriented Programming (4 units)
Spring 2016

Instructor:

Dr. Lori Carter (619) 849-2352
loricarter@pointloma.edu office: RS 214

Office hours:

MWF 8:15-9:45, 1:00-1:30 TTh 10:30-12:00

Course Time and Location

Lecture: TR 1:30-2:45 RS 13 Lab: R 2:50-4:40 Bresee Lab

Text:

Anderson and Franceschi. *Java 6 Illuminated:An Active Learning Approach,4th Edition.* Jones and Bartlett 2016. We will cover chapters 7, 9-14 in this class.

Course Catalog Description:

As a continuation of CSC 143, this course deals with more advanced computing constructs and ideas reinforced in weekly labs. Topics include object-oriented design, inheritance, polymorphism, exception handling, simple ADT's, and recursion, along with more intentional development and debugging strategies. Students gain experience in the design of graphical user interfaces and event driven programming culminating with the creation of a multi-week game-based project. Lecture three hours and laboratory two hours each week.

Course 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.
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- 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.

Course Organization:

Lectures: Cover the highlights of chapters assigned – **not** a substitute for reading. The lecture slides can be obtained from Canvas

Quizzes: In addition to the major exams, 3 written quizzes will be administered during the. These are to encourage you to keep current with the material as it is presented. The quizzes are currently scheduled for **January 28, March 15, and April 14.** These quizzes will ask questions about labs and lectures. Students missing a quiz for a school function must arrange to take the quiz in advance. Missing a quiz for other reasons, short of an officially documented emergency will most likely result in a grade of 0.

Prep labs: All labs will have 2 parts, a prep lab and a main lab. **Prep labs must be completed individually and without any help from a peer.** You may ask a lab assistant or Dr. Carter for help on these**. Prep labs must be worked on during the lab period, and turned in before you leave or no credit will be awarded**. The lowest prep lab will be dropped.

Main lab assignments may be completed individually, or in a group of 2. If you complete a lab as a team, please turn in only 1 lab sheet and code copy with both names on the assignment. The privilege of working together on labs may be revoked at any time if it appears that it is not helping you learn the material. Grades for programming assignments will be based on correct compilation, correct execution, correct and adequate documentation, and form. Unless otherwise stated, labs are due within the **first 15 minutes** of the lab period following the one in which they were assigned. **On the day that a lab is due, you have 1 chance** to get it signed off by a lab assistant. The lab assistant will either sign it off as correct, or make notes regarding what works and what doesn't. **No late labs are accepted.** However, I will drop the lowest main lab grade and you may turn in any unfinished lab on time for partial credit. The exception to this policy is the programming project which is worth 2 labs. That one cannot be dropped.

Midterm: The midterm will cover lecture as well as lab material from chapters 7-11 of the book. The exam will be composed of a written portion and a practical programming portion. Students missing the midterm exam for a school function must arrange to take the exam in advance. Missing an exam for other reasons, short of an officially documented emergency will most likely result in a grade of 0. The midterm is currently scheduled for **February 16 (written) and 18 (programming)**.

Final Exam: The final exam will consist of a **written final given on Tuesday of the last week of classes**, with a take-home portion **due at 1:30 the Tuesday of finals week**, and a **programming exam** during the last lab period of the semester. 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.

Grading:

Quizzes	15%	Midterm	20%
Prep labs	10%	Final Exam	25%
Main Labs	30%		

Final grades will be determined as follows:

100-93%	A	80-82.9%	B-	67-69.9%	D+
90-92.9%	A-	77-79.9%	C+	63-66.9%	D
87-89.9%	B+	73-76.9%	C	60-62.9%	D-
83-86.9%	B	**70-72.9%**	**C-**	0-59.9%	F

University 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 becomes an expression of faith. Being of Wesleyan heritage, we aspire 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.

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 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=18&navoid=1278#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. Students can also reach the Disability Resource Center by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. 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=18&navoid=1278#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=18&navoid=1278#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=18&navoid=1278#Academic_Honesty).

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 4 unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirements can be provided upon request.

Tentative Schedule

Mon	Tues	Wed	Thurs	Fri
	Jan 12 Mon schedule	13	14 Object exercise Arrays and Arraylists chapter 9 **Lab: Arraylists**	15
18 MLK	19 Chapter 7 User Defined classes 7.1-7.6	20	21 7.7-7.9 – data manipulation methods **Lab: 1st class lab**	22
25	26 7.10-7.11 toString, .equals, static members, scope, arrays of objects	27	28 **Written quiz** Start inheritance 10.1-10.2 **Lab: 2nd class lab**	29
Feb 1	2 More on inheritance and start polymorphism 10.3-10.6	3	4 Continue with poly **Inheritance and polymorphism lab**	5
8	9 Exceptions, writing to files 11.1-11.4	10	11 More files **reservation lab**	12
15	16 **Written exam,** provide practice prog exam	17	18 **Programming exam**	19
22	23 Go over exams Introduction to GUIs 12.1-12.3	24 Gone to Panama	25 Reservation lab due **Debugging lab, short GUI lab**	26
Feb 29	Mar 1 Events, textfields, jbuttons 12.1-12.6	2	3 Layouts - grid and border 12.12-12.13 **Event lab**	4
7 Spring Brk	8 Spring Brk	9 SB	10 Spring Brk	11 Spring Brk
14	15 **Quiz on events** Radio buttons, checkboxes, lists, combo boxes 12.7-12.9	16	17 Timers and mouse 12.10-12.11 **Timer lab**	18
21	22 Nesting layouts 12.14	23	24 Easter	25 Easter
28 Easter	29 Recursion 13.1-13.2 Introduce project	30	31 More recursion 13.3, 13.7 **Short recursive lab, work on project**	Apr 1
4	5 Recursive Binary search 13.5 Start linked lists	6	7 Linked lists 14.1, Project due **Linked list lab**	8
11	12 Linked lists of objects 14.2	13	14 **Quiz on LLs** A stack with a linked list 14.3 **Stack lab**	15
18	19 Array representation of stack 14.5	20	21 Queue with LL and array 14.4,14.7 **Queue implementation lab**	22
25	26 **Written final**	27	28 **Programming final**	29
Finals	1:30 take-home due			