

CS250 Introduction to Computer Science II

Syllabus - Spring 2019

Catalog Description

A second course in programming that is a continuation of CS 150. The focus of this course is object-oriented programming in C++. Concepts taught include pointers, classes, operator overloading, inheritance, and polymorphism. These concepts will be reinforced with advanced programming projects including introductory game programming. Prerequisite: CS 150 and MATH 125 each with a minimum grade of C. 4 credits.

Learning Outcomes

The following are the course specific learning outcomes:

Upon completion of the course, students should be able to:

- use modular programming to divide a larger software project into smaller constituent functions
- write programs that reflect the principles of object-oriented programming including composition of objects, operator overloads, dynamic memory allocation, inheritance and polymorphism
- apply code reuse, derived classes and class hierarchies
- construct, execute and debug programs using a modern IDE and associated tools such as unit testing tools and visual debuggers

This course provides the following learning outcomes for the CS major or program:

- apply strategies for abstract problem solving
- be able to communicate in a collaborative environment, present ideas, and document work at all stages of software development.
- identify the skills necessary to become a lifelong learner in the rapidly changing field of Computer Science.

Instructor Details

Professor:	Chadd Williams
Email:	chadd@pacificu.edu
Office:	Strain 202
Office Hours:	MWF 10-11am, TTh1-2pm

Course Details

Course Title:	CS250 Introduction to Computer Science II
Prerequisite:	CS150 Introduction to Computer Science I with a grade of C or better
Required for:	CS250 is a prerequisite for CS260 Intro to Java & Android Programming, CS300 Data Structures, CS310 Theoretical Computer Science, CS315 Interaction to Human Computer Interaction, and CS360 Special Topics, thus a grade of C or better in CS250 is required to get into those courses.
Meeting Times:	MWF 11:45am-12:50pm There is no designated lab for this course although some days will be lab days
Location:	Scott 204
Textbooks:	1. Sign in or create an account at learn.zybooks.com 2. Enter zyBook code: PACIFICUCS250Spring2019 3. Subscribe A subscription is \$58. No other textbook is required for this course.
Software:	Microsoft Visual Studio 2017 Community Edition. See me for VirtualBox accommodations. visualstudio.com
Course Website:	http://zeus.cs.pacificu.edu/chadd/cs250s19

Course Assessment

As a general rule of thumb, students are expected to spend 2 hours outside of class for each hour of class time. This means that you should be spending 8 hours per week outside of class on the readings, projects, and assignments. At least 1 hour a week should be spent on non-assignment based studying

Grade Distribution:

6-8 Programming Assignments	35%
zyBook Participation Activities	5%
Unscheduled Quizzes (open-note)	5%
3 Exams	35%
Final Exam	20%

Programming Projects Grading:

Successful execution.	40%
Elegant and efficient design. This includes the proper use of functions, classes, and modules as well as the production of efficient code.	40%
Acceptable structure, style, documentation. You must follow the C++ Coding Standards, version 7	20%

Percent Breakdown:

			[92,100]	A		[90,92]	A-
[88,90]	B+		[82,88]	B		[80,82]	B-
[78,80]	C+		[72,78]	C		[70,72]	C-
[68,70]	D+		[60,68]	D			
			[0,60]	F			

Important Dates

Tentative dates for Exams:

Exam 1: Friday, February 22, 2019

Exam 2: Friday, March 22, 2019

Exam 3: Friday, April 19, 2019

All exams and quizzes must be taken in PENCIL!

Spring Break:

Saturday, March 23, 2019 – Sunday, March 31, 2019 (No Class)

Senior Project Day:

Wednesday, April 24, 2019 (No Class)

Reading Day:

Wednesday, May 8, 2019

Date of Final:

Saturday, May 11, 2019 8:30am-11:00am

Academic Calendar:

<https://www.pacificu.edu/academics/academic-resources/academic-calendar>

Course Policies

Attendance: Attendance at every class is critical to your success in this course. I expect you to be on time and that you stay until the end of class. You will not be allowed into the classroom once I close the door and start teaching. Any missed lecture is your responsibility to make up; just remember that if you fall behind, it may be very difficult for you to catch up.

- I reserve the right to raise or lower your grade based on class participation and attendance. Specifically, I may lower your grade or may officially withdraw you from the course through the tenth week of the semester for poor attendance or participation. Please note, attempting to come in late is worse than missing class as it disrupts the entire class, so once again, do not come in late. Your final grade may be lowered by 1/3 of your final course grade for each day (or portion thereof) of class missed. Please notify me PRIOR to class if you must miss class for any reason.
- No early or late exams/final will be given. No incompletes will be given.

Programming Assignments: All assignments are to be programmed in C++ using Visual Studio 2017 Professional. Both the electronic copy and hardcopy of your assignments are due before class starts on the day that they are due.

- The hardcopy must be placed on the instructor's desk before class starts on the day the assignment is due. If the hardcopy uses more than one sheet, then all sheets must be stapled in the upper-left corner. The code must be printed in color. Failure to submit a hardcopy of the assignment will result in a loss of 20% of the assignment points.
- The electronic copy must be placed in the appropriate 'CS250 Drop' folder on grace before class starts on the day the assignment is due. Failure to submit an electronic copy will result in a loss of 40% of the assignment points.
- A program that does not successfully compile or produces no output loses 40% of the assignment grade.
- Assignments can be turned in up to 24 hours late with a penalty of 10% of the grade. Anything turned in later than 24 hours of the assignment deadline will NOT be accepted. There is no late grace period for the final assignment.
- Make sure that you test your programs before submitting them. You may only submit your assignment once.
- Neither computer failure, software failure, nor lack of computer access are accepted as excuses for late programs; therefore, start work on the programs as soon as they are assigned, and don't put them off until the last minute. Further, corruption of programs due to bad disk media is also not accepted as an excuse for late programs; therefore, always keep a current backup of all programs on a separate disk. Please note that the Computer Science departmental servers are not backed up.

Academic Dishonesty: Pacific University has no tolerance for academic misconduct/dishonesty. It is university policy that all acts of misconduct and dishonesty be reported to the Associate Dean for Student Academic Affairs. Sanctions that may be imposed for such misconduct range from an "F" for the assignment, an "F" for the course, and suspension or dismissal from the university. Forms of academic misconduct include but are not limited to plagiarism, fabrication, cheating, tampering with grades, forging signatures, and using electronic information resources in violation of acceptable use policies.

- For programming assignments, plagiarism takes the form of, *but is not limited to* copying code from someone else, whether copying files, glancing at someone else's code, typing from someone else's notes, typing from someone's description of a solution (written or verbal) or typing while they dictate. The source can be a classmate, former student, website, program listing found in the trash, or anything else. Furthermore, plagiarism even on a small part of the program is cheating.
- You should also note that aiding someone else's cheating also constitutes cheating. You should never leave your code where someone else could have access to it, such as staying logged onto a machine or placing solutions in the recycling bin where another student may take it.

- Sanctions that may be imposed for academic dishonesty are:
 - First offense for cheating: 12% subtracted from your final course grade
 - Second offense for cheating of any kind: 'F' in the course

Other:

- You may be asked to leave the class if you are causing a distraction e.g. cell phone ringing, talking, etc.
- If you have a complaint regarding a grade on an assignment or exam, write a one paragraph description of why you feel the grade is incorrect and deliver it to the instructor within five working days (M-F are considered working days) of when the graded material was returned to you. I will not consider any grade changes later than five working days after the graded material was returned.

Learning Support Services for Students with Disabilities: If you have documented challenges that will impede your learning in any way, please contact our LSS office in Scott Hall (ext.2107). The Director will meet with students, review the documentation of their disabilities, and discuss the services that Pacific offers and any appropriate ADA accommodations for specific courses.

The Tutoring and Learning Center is located in Scott Hall 127: The center focuses on delivering one-on-one and group tutoring services for math and science courses and writing skills in all subjects. Students should consult with the center's director for information on tutoring available for other subjects. Day and evening hours; walk-ins welcome!