

# CS150 Introduction to Computer Science I

## Fall 2016

### Catalog Description

A first course in computer programming fundamentals: no previous programming experience is required. This course will be taught in C++ and include programming projects in a variety of areas. Course content includes data types, selection structures, repetition structures, functions, arrays, structures and I/O. In addition to three lectures per week, the class meets weekly for a laboratory session. Corequisite: Math 125. 4 hours.

### Topics

- Basic syntax and semantics of C++
- Variables, types, expressions and assignment
- Simple input/output
- Conditional and iterative control structures
- Functions and parameter passing
- Structured decomposition
- Problem-solving strategies
- The role of algorithms in the problem solving process
- Implementation strategies for algorithms
- Debugging strategies

### Student Learning Outcomes

- Use C++ datatypes to describe data to solve a problem
- Apply control structures correctly to encode logic in software
- Be able use modular programming to divide a larger software project into smaller constituent functions

### Instructor Details

Professor:	Chadd Williams
Email:	chadd@pacificu.edu
Office:	Strain 202
Office Hours:	Mondays, Tuesdays, and Thursdays 2-3pm or by appointment

### Course Details

Course Title:	CS150 Introduction to Computer Science I
Corequisite:	Math 125 Precalculus
Required for:	A grade of C or better in CS150 is required for CS250 Introduction to Computer Science II
Meeting Times:	MWF 1pm - 1:50pm (Lecture) Tuesdays 9:40am - 11:10am (Lab)
Location:	Lecture in Marsh LL12 Lab in Marsh LL12
Textbooks:	<u>Starting Out with C++ From Control Structures through Objects</u> (8 <sup>th</sup> )

	edition) by Tony Gaddis Addison Wesley ISBN-13: 978-0-13-376939-5 ISBN-10: 0-13-376939-9
Software:	Microsoft Visual Studio 2015 running on Windows.  Instructor will provide directions in class on how to obtain this software.
Course Website:	<a href="http://zeus.cs.pacificu.edu/chadd/cs150f16/">http://zeus.cs.pacificu.edu/chadd/cs150f16/</a>

## 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 homework. At least 1 hour a week should be spent on non-assignment based studying

### Grade Distribution:

6 - 8 Programming Assignments	35%
Unscheduled Quizzes (open-note)	5%
3 Exams	35%
Final Exam	15%
Lab Projects	10%

### Programming Projects Grading:

Successful Execution	70%
Acceptable structure, style, documentation, and efficiency. You must follow the C++ Coding Standards, version 6.1	30%

### 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			

**All exams and quizzes must be taken in PENCIL!**

## Important Dates

*Tentative dates for Exams:*

Exam 1: Wednesday, September 21, 2016

Exam 2: Wednesday, October 19, 2016

Exam 3: Wednesday, November 16, 2016

*Labor Day:*

Monday, September 5, 2016 (No Class)

*Fall Break:*

Friday, October 7, 2016 (No Class)

*Thanksgiving Holiday:*

Wednesday, November 23, 2016 - Sunday, November 27, 2016 (No Class)

*Reading Day:*

Wednesday, December 7, 2016

*Date of Final:*

**Friday, December 9, 2016 8:30-11am**

*Academic Calendar:*

<http://www.pacificu.edu/current-undergraduate/academics/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 ready to go once it is 1pm 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. Further, 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.
- **Labs:** If you are late or fail to show up for lab, you will receive a maximum of 50% of the lab project grade.

**Programming Assignments:** All assignments are to be programmed in C++ using Visual Studio 2013. Both the electronic copy and hardcopy of your assignments are due at 1pm on the day that they are due.

- The hardcopy must be placed on the instructor's desk before 1pm on the day the assignment is due. If the hardcopy uses more than one sheet of paper, 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 30% of the assignment points.
- The electronic copy must be placed in the 'CS150-01 Drop' folder on Grace by 1pm on the day the assignment is due. Failure to submit an electronic copy will result in a loss of 70% of the assignment points.
- A program that does not successfully compile or produces no output loses 70% of the assignment grade.
- Assignments can be turned in up to 24 hours late with a penalty of 10% of the grade. If the assignment is between 24 and 48 hours late you will lose 20% of your grade. Anything turned in later than 48 hours of the assignment deadline will NOT be accepted.
- *One exception.* I do allow ONE programming assignment to be turned in up to ONE day late without penalty. Your reason does not matter and I do not need to know why. All other late assignments will carry the standard loss of points. To use this gift, you *must* send me an email before 1pm on the day

the assignment is due. This email is to have GIFT as the subject and you must include your name and the assignment number and assignment name in the body of the email. If this information is not included in the email then the assignment will be considered late.

- Make sure that you test your programs before submitting them. You may only submit your assignment once.
- All code in any form generated from this course becomes the intellectual property of Pacific University. You may not share this code with anyone without obtaining written permission from Pacific University.
- 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.

**Lab Projects:** All lab projects must be turned in to 'CS150-01 Lab' on Grace by Friday at 5pm of the week that they were assigned. If you do not submit the lab project by that time then you will receive a 0 for that project grade.

**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.
- **No one other than the instructor or a TA may look at your source code.**
- **You may not look at another student's source code**
- 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.

**Tutoring:** Tutoring for Computer Science will take place in the 24 Hour room in the Library. Tutoring times will be distributed once they are finalized.