

CS130 Introduction to Software Tools

Course Syllabus – Fall 2017

Catalog Description

Many disciplines are finding the need to gather, manipulate, analyze, and graph data. This course will introduce students to software tools that aid in this process. Software that is widely used at Pacific includes: a Statistics Software Package, Excel, Word, and PowerPoint. Class includes lab projects.

Prerequisite: MATH 125 with a minimum grade of C. 2 credits.

Student Learning Outcomes

- Demonstrate proficiency in using Excel to create professional spreadsheets that incorporate charting, built-in functions, nested logic, and simple statistics.
- Demonstrate proficiency in using R to organize, manage, present, and analyze data.
- Identify the appropriate software tool to use for a particular task.

Computer Science Learning Outcomes

- Demonstrate a fundamental understanding of computation and programming.
- Apply strategies for abstract problem solving

Topics

- Overview of Networks, Servers and the Basics
- Microsoft Excel
 - Worksheets, Cells and Formula
 - Absolute vs. Relative Cell References
 - Built-in functions
 - What-if analysis
 - Comparison and Logical Operators
 - Nesting Logic
 - Simple Statistics in Excel
 - Exponential and Logarithmic Problems
 - Charting
- R
 - Datasets and collecting data
 - Datatypes
 - Descriptive Statistics
 - Tables and Graphs
 - Regression Analysis
 - Hypothesis Testing
- Word
 - Mail Merge
 - Equation Editor

Instructor Details

Professor:	Douglas J. Ryan
Email:	ryandj@pacificu.edu
Office:	Strain 201
Office Hours:	MWF 10:30am – 11:30am

Course Details

Course Title	CS130-01 Introduction to Software Tools
Prerequisite	Math 125 Precalculus with a grade of C or better
Focal Study:	10: Essential Business Skills for Everyone 14: Technology and Popular Culture 24: Modeling Our Changing World
Recommended for:	Biology, Environmental Science, Exercise Science, Social Sciences
Meeting Times:	MW 2:15pm – 3:50pm
Location:	Marsh LL12
Textbooks:	None
Software:	Microsoft Office & R Studio
Course Website:	http://zeus.cs.pacificu.edu/ryand/cs130/fall17

Course Assessment

Grade Distribution:

3 Assignments	30%
Midterm Exam	30%
Final Exam	40%

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

Midterm Date:

Monday, September 25, 2017

2:15pm – 3:50pm in Scott 204

Date of Final:

Tuesday, October 17, 2017

6:00pm- 8:30pm in Scott 204

Academic Calendar:

<http://www.pacificu.edu/as/calendar>

Course Policies

1. **Attendance:** Attendance at every class is critical to your success in this course. I expect you to be on time and ready to go at the beginning of each class 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. **Attempting to come in late is worse than missing class.** Any missed lecture is your responsibility to make up; just remember that if you fall behind, it will 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 for poor attendance. Further, your final grade may be lowered by 1/3 of your final course grade for each day (or portion thereof) of class missed.
- Under no circumstance are you to come to class late. Once the door is closed and class has started, you are not to enter class. The only exception is on an exam day. You can come in any time during an exam but will not receive any additional time to complete the exam.

2. **Assignments:** All assignments are to be solved using the specified software. The electronic copy of your assignment is due by 2:15pm on the day that the assignment is due.

- a. The electronic copy must be placed in the 'CS130-01 Drop' folder on Grace by 2:15pm on the day the assignment is due. Failure to submit an electronic copy will result in a loss of 100% of the assignment points.
- b. Assignment solutions can be turned in up to 24 hours late with a penalty of 10% of the assignment points. Anything turned in later than 24 hours after the assignment deadline will NOT be accepted.
- c. Make sure that you test your solutions before turning them in. You may only submit each solution one time.
- d. All solutions in any form generated from this course become the intellectual property of Pacific University. You may not share your solution with anyone without obtaining written permission from Pacific University.

3. No early or late exams/final will be given. No incompletes will be given.

4. **Academic Misconduct Policy:** Pacific University has no tolerance for academic misconduct/cheating. It is university policy that all acts of misconduct and dishonesty be reported to the Associate Dean for Academic Affairs. 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. Please consult

the Academic Conduct Policies in the A&S Catalog for more details.

- a. For assignment solutions, plagiarism takes the form of, but is not limited to copying content from someone else, whether copying files, glancing at someone else's solution, typing from someone else's solution or typing while someone else dictates. 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 a solution is cheating on the entire solution.
- b. You should also note that aiding someone else's cheating also constitutes cheating. You should never leave your solution 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.
- c. Sanctions that may be imposed for academic dishonesty are:
 - o First offense for cheating: 12 percentage points subtracted from your final course grade
 - o Second offense for cheating of any kind: 'F' in the course

5. Neither computer failure, software failure, nor lack of computer access are accepted as excuses for late solutions; therefore, start work on your solution as soon as possible, and don't put homework off until the last minute. Further, corruption of a solution due to bad disk media is also not accepted as an excuse for late solutions; therefore, always keep a current backup of all solutions on a separate disk. Please note that the Computer Science departmental servers are not backed up.

Backup options include: BoxerApps/GoogleDrive (but don't convert your files!), a USB Stick, your BoxerMail.

6. 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 Clark Hall (ext.2717; lss@pacificu.edu). LSS staff 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. Website at <http://www.pacificu.edu/about-us/offices/learning-support-services> .

7. You may be asked to leave the class if you are causing a distraction e.g. cell phone ringing, talking, etc.

8. 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 three 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 two working days after the graded material was returned.

9. Tutoring and Learning Center (TLC): The TLC is located in Scott Hall, 1st-floor. The center focuses on delivering one-on-one and group tutoring services for foreign languages, 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! Website at <http://www.pacificu.edu/about-us/centers/tutoring-and-learning-center>

10. Unauthorized Recordings: Students are prohibited from making audio and/or visual recordings of lectures or presentations without prior consent of the instructor or presenter.