

Software Development

CSC 210

Fall 2017

Contact Information

Instructor

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GS 823; Office Hours: MWF 4:15 - 5:15

TA

Daniel Dicken

SLs

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Course email: cs210f17@cs.arizona.edu

(This email reaches all of us)

- Dr. Eric Anson
- Joined Computer Science Faculty Fall 2015
- BS Math/Comp Sci – Pepperdine University – 1985
- MS Mathematics – University of Arizona – 1993
- PhD Comp Sci – University of Arizona – 2000
- Worked all throughout industry and government from the Feds to the County and from biotech to Raytheon
- Taught 352, 245 and 473
- Taught 14 math classes while a TA in mathematics

Websites:

<http://www.cs.arizona.edu/classes/cs210/fall17/>

- Class homepage

<https://piazza.com/arizona/fall2017/csc210/home>

- Questions and Announcements

<http://d2l.arizona.edu>

- Grades

Books

Textbooks...

- No required text books, but you might want some book on Java. The following are officially recommended:
- *Core Java*, 10th edition by Cy S. Horstmann
- *Java in a Nutshell*, 6th Edition by David Flanagan and Benjamin Evans (available as a free ebook from the library)
<http://proquest.safaribooksonline.com.ezproxy1.library.arizona.edu/book/programming/java/9781449371296>
- But there are many good Java books. Another free online book is written by our own Rick Mercer:
<https://www2.cs.arizona.edu/~mercero/Books/227Sum15.pdf>

Assignments

- Assignments
 - Most will be Java Programs
 - Mostly weekly
 - Usually due on Thursday Night
 - Use `git` to turn in
 - No late work

Exams

- Short pop quizzes may occur any time (including in sections)
 - 5% of the grade allocated
- Midterms
 - There will be two midterms
 - Their exact dates are still TBA, but they will occur around the 6th and 11th weeks of the term
 - The exact dates will be announced a MINIMUM of two weeks prior to the date of the test
- Final Exam (Cumulative)
 - Wednesday, December 13, 3:30pm – 5:30PM

Grading

Grading

- Assignments 40%
- Sections 5%
- Quizzes 5%
- Exam 1 15%
- Exam 2 15%
- Final 20%

Final Grade

Standard 90/80/70/60 scale

Might lower the bar, never raise it

NO CHEATING!

Capsule summary:

Don't cheat in my class!

Don't make it easy for anybody else to cheat!

1st Offense will result in at least a drop in letter grade

2nd Offense will result in failing the course

Cheating for this class is passing off anyone else's work as your own **or** helping another student to cheat. Helping another student to cheat might mean leaving your code where someone else can get at it.

Cheating Summary

- Your integrity is worth more than a score on an assignment/test or even grade in a course
- Eventually it will catch up with you. If you don't know the material from this class you will not make it through the classes that follow.
- The department takes cheating VERY seriously and if you get caught the consequences are grim.

Attendance

Attendance of lectures is expected but not recorded, except implicitly via pop quizzes. Attendance of sections is recorded and counts toward your grade.

You will be responsible for material covered in class even if it does not appear in the notes posted online.

You've paid for the class, you should come to the class

You probably won't do well if you're not coming to the class and surely won't do as well as you would if you did come to class.

Classroom Behavior

- The basic rule is be considerate of your fellow students (and also your hard-working instructor).
- I don't mind use of laptops or tablets, but for those who do find them distracting let's make the left side (my right, your left) of the classroom a “screen free” zone.
- Sit close to the front if possible
- Read the department code of conduct.

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- This class and you are very important to me and the department.
- Though the exact layout of the course is not yet fully determined, the goal is known: To help you to be better programmers.

Course Topics

1. Command line and some UNIX tools.
2. Using a Source Control Tool
3. The Java Programming Language.
4. Program Design
5. Program Testing
6. Program Debugging

Tips

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2. Start assignments right away!

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2. Start assignments right away!
3. Come to sections!
4. Ask questions.
5. Play and experiment.

Goals

1. Learn the Material!
2. Be Considerate and Kind to Others
3. Come to Class & Sections
4. **HAVE FUN!!!!**

UNIX & Bash

- We'll start the class by learning a little about command line interfaces.
- So that we're all working the the same commands it would be good if we all were working on the same interface.
- Since we're all going to be computer scientists, we'll learn the UNIX shell called Bash.

Macs

- The Mac OS is now built on Unix, so getting access to Bash is as simple as opening a terminal window.

Windows

Windows does not have a built in Bash interface, but fortunately there are several options you can take to be able to use the Bash shell on a windows machine.

Windows Subsystem for Linux

Windows 10 feature that enables you to run native Linux command-line tools directly on Windows, alongside your traditional Windows desktop and modern store apps. The instructions for installing it are found here:

https://msdn.microsoft.com/en-us/commandline/wsl/install_guide

Cygwin

Cygwin is a program for that lets you run the Bash shell and many UNIX tools on a Windows system. There is a video on the web page showing how to install and update Cygwin.

Cygwin can be obtained here:

<https://www.cygwin.com/>

Connect to Department Machine

You can also use a terminal program to connect to `lectura`, a Computer Science Department Linux machine. All students enrolled in a CS class have an account on `lectura`.

The disadvantage here is that you will be not working on your own computer. I would recommend one of the previous programs for this class, but if you are concerned about space, this is a workable solution.

Running **bash** on **lectura**—Windows

"PuTTY" is a free Telnet/SSH client that I recommend for connecting to **lectura** from a Windows machine.

If you Google for "putty", the first hit should be this:

PuTTY Download Page

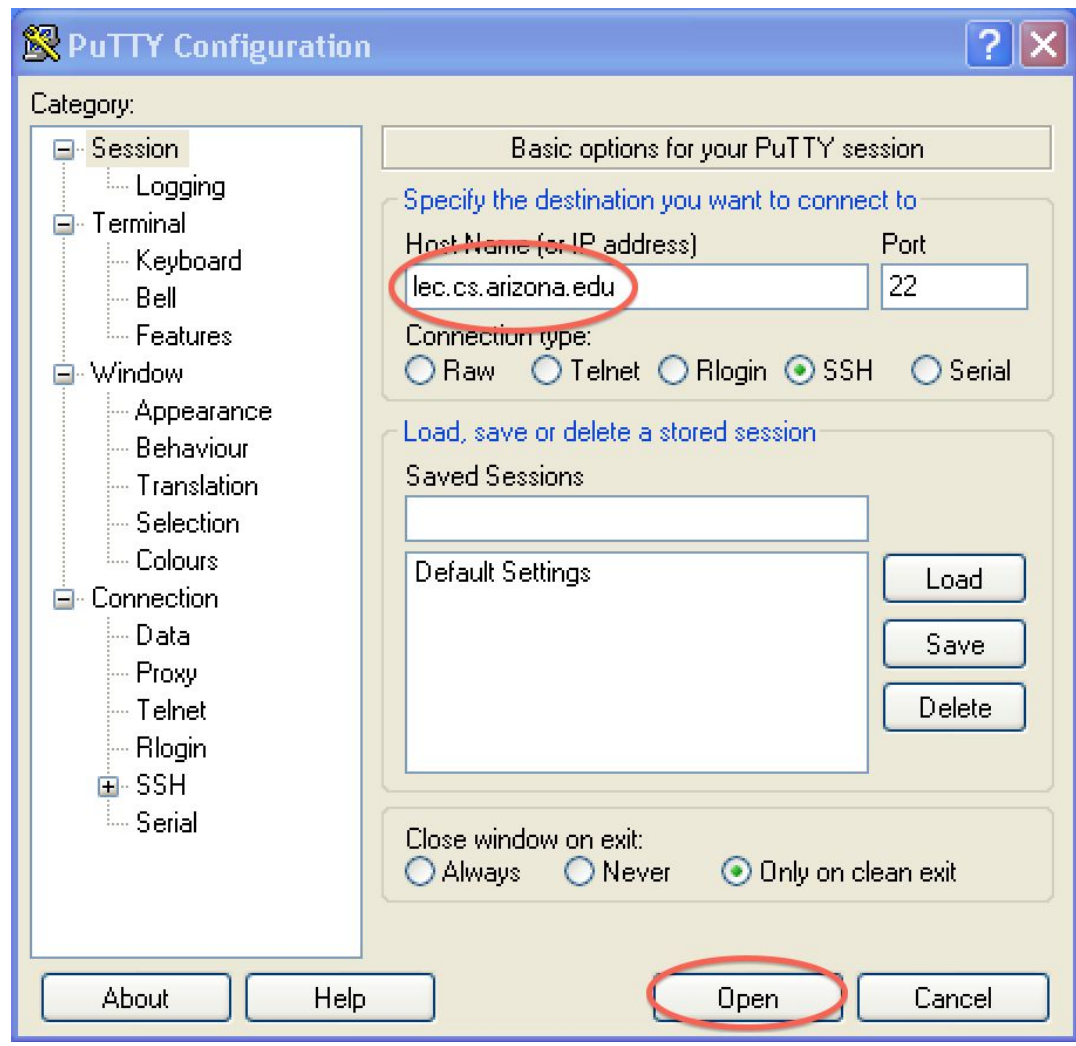
- www.putty.org

Download **putty.exe**:

putty.exe is just an executable file; there's no installer. Save **putty.exe** to a convenient place, perhaps your Desktop.

Running **bash** on **lectura**—Windows

Click on **putty.exe** to run it. In the dialog that opens, fill in **lec.cs.arizona.edu** for Host Name and click **Open**.



Transferring Files to lectura

If you work on lectura, you will probably also want to have a way to transfer files from your computer to lectura and visa versa.

One method is to use a secure ftp program. On the putty page you can also download the Bitvise SSH Client. This program gives you both an ssh program (secure shell like putty) and a sftp program with a graphical interface.