CS 211: Course Mechanics

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Spring 2016, Week 1
Mechanics of class

Syllabus
Read It. The following slides are a summary of its contents but not a substitute.

Schedule
Available now here:
http://www.cs.gmu.edu/~kauffman/cs211/schedule.html
Lists all approximate dates for major events and reading schedule
We’re on Piazza

Piazza For

- Project and Lab Discussion
- Questions about programming
- Announcements from Staff
- Course Schedule
- 95% of communication/questions
- Read the etiquette post (up shortly if it’s not already)

Email for

- Appointments outside of office hours
- Unresolved grading disputes
- Personal emergencies/problems

Blackboard for

- Assignment Submission
- Grades
Lecture

<table>
<thead>
<tr>
<th>Mechanics</th>
<th>Hot Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk</td>
<td>Front few rows are <strong>hot seats</strong></td>
</tr>
<tr>
<td>Code</td>
<td>I will grill hot seats</td>
</tr>
<tr>
<td>Try</td>
<td>Just try: answer questions, give feedback</td>
</tr>
<tr>
<td>Ask</td>
<td>Up to 3% overall bonus</td>
</tr>
<tr>
<td></td>
<td>Susy has 20 pts, max in class, 3% bonus</td>
</tr>
<tr>
<td></td>
<td>Sammy has 10 pts, 1.5% bonus</td>
</tr>
<tr>
<td></td>
<td>Don’t want/need participation, don’t sit in hot seats</td>
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<tr>
<td></td>
<td>Don’t like lectures, don’t come, but don’t complain if you miss something</td>
</tr>
<tr>
<td></td>
<td>Remember: <strong>someone</strong> is paying $1,272.75 or more for the privilege of you being in this room.</td>
</tr>
</tbody>
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Lab

- Attendance required - they’ll check
- **Must be in lab** to get credit for code/quiz

**50% Exercise Labs**

- Submit code for credit
- Exercise labs are Open Resource / Open Collaboration

**50% Quiz or Task Labs**

- Write paper quiz or write short program and submit for credit
- Closed resource, no collaboration
Reading and Practice

Building Java Programs (Reges/Stepp)

- Pretty good book and funny too (count pop culture refs)
- Good online resources for practice
- New buys get code to watch video supplements
- Don’t need MyProgrammingLab supplement

Lab Manual

- Required, good group exercises in there
- Read before lab

Java Docs

- Official documentation of Java library
- Becomes more important later in the class
Practice! It!

PracticeIt
- All textbook exercises available online for practice
- Site gives immediate feedback on correctness of programs
- PracticeIt Web Site

CodingBat
- Alternative practice site with lots of good intro java exercises
- Coding Bat Site

Others
- Probably lots of others: post them on Piazza
Coordination

All sections of CS 211 are coordinating on

- Projects
- Labs
- General schedule of exams
- General topic coverage

Kauffman sections (002, H01) will be specialized on

- Lecture Content
- Exam Content
- Extra Bonus Credit
  - Participation in your sections
  - Bonus exam questions in other sections
Several folks in here are in the honors section
Most programming projects will have a special Honors section
Required for Honors students to do
Optional for standard section; no extra credit for attempting but they should be fun
Making Programs

Edit, Compile, Run, Fix: You need

- Text Editor (jedit, emacs, vim, notepad, etc)
- Compiler (javac)
- Run environment (command line like cmd.exe on mingw or Terminal.app)

That’s it, the rest is gravy
Making Programming Faster

- An IDE combines these things in a sensible way
  - Text Editor
  - Compiler interface button
  - Run interface

- Fanciness
  - Debugger interface
  - Testing interface
  - Documentation generation
  - File browser
  - Read, Eval, Print Loop for interactive testing

DrJava does all this, but…
All IDEs dumb down the act of creating programs and disguise many details.
The official java tools of the course are

- jdk 1.8, official build and run tools from Oracle
- DrJava, a simple, superior java IDE (if you’re into IDEs)

Special Note:

- I do not know how to use eclipse
- I will not be learning how this semester.
- If I can help it I will never learn eclipse.
- TAs may be able to help you but are not required to do so.
- In class I will use DrJava, Emacs, and command line.
- If you have questions on those I’m happy to help.
Tools

DrJava

Eclipse/Netbeans
Alternatives

Vim

Emacs
Tools that Grow

DrJava

Eclipse

Emacs
Special Note on DrJava

We’ve made some improvements at GMU

► Better test result printing
► Fixed debugger activation bug
► Unofficial, trying to get into main distrib
► Strongly encourage DrJava users to grab this version
► Download here: https://cs.gmu.edu/~kauffman/drjava/
Cheating

Don’t cheat

- Easy to catch
- Likely to get caught
- Painful for everyone (makes me ornery)
- You can’t lie to nature

*For a successful technology, reality must take precedence over public relations, for Nature cannot be fooled.*

– *Richard Feynman, Challenger Disaster Report*

Unsure if something constitutes cheating?

- Stop and ask me
- Sharing on Lab Exercises is fine
- Sharing on projects is not
... I can say that at my workplace I’ve seen more than one freshout who clearly hadn’t made it through college without significant assistance from Stack Overflow and other people’s blogs. None of them lasted very long. Perhaps knowing how to solve problems for yourself isn’t necessary to get a college degree nowadays, but it’s surprising how useful it can be in a career where you solve problems for a living.

▶ bunderbunder, Discussion of cheating using StackOverflow on http://news.ycombinator.com/item?id=4910406