Syllabus
CSS 605 - Object-Oriented Modeling in Social Science
Fall 2014

Wednesdays – 4:30pm to 7:10pm
Innovation Hall 326

Instructor

Randy Casstevens
Adjunct Assistant Professor
Department of Computational Social Science

Email: rcasstev@gmu.edu
Office Hours: Before class starting at 3pm and by appointment

Website: https://code.google.com/p/css605-fall2014/
- Contains code examples, assignments, course calendar, etc.

Motivation

Provide the students with the computing skills needed to perform research in CSS. The course will cover object-oriented design and implementation with a focus on developing agent-based models. Java is the programming language used this semester and the code development will be demonstrated in Eclipse.

Co-requisite:

CSS 600 – Introduction to Computational Social Science or permission of instructor

Book Recommendations (optional)

There are no required books for this course, but you may find a good Java reference book useful. Here are some books that I recommend:

- *Java: How to Program* by Deitel and Deitel (does not necessarily need to be the latest version)
  - This is a good overall reference book for Java
- *The Elements of Java Style* by Vermeulen et al.
  - This book describes standards for writing Java code that help make your code easier to read.
- *Design Patterns: Elements of Reusable Object-Oriented Software* by Gamma et al.
  - This book describes reusable patterns that help you write better code.

Java References

- Oracle Java Tutorials
  - http://docs.oracle.com/javase/tutorial
- Java API (use the version that corresponds to your version of Java)
  - http://docs.oracle.com/javase/7/docs/api/

Grading

- Weekly Quizzes 2 points each * 14 weeks = 28 points

  Since the material builds from one week to the next, it is important that I keep track of how the class is doing.

- Weekly Coding Assignments 4 points each * 12 weeks = 48 points

  Due: Mondays at noon (see calendar on course website)
  The best way of becoming a better programmer is writing code, so there will be a coding assignment every week.

- Two Coding Competitions 8 points & 16 points = 24 points

  Students are required to write a computational agent that will compete against agents written by their classmates.

- Class Participation 4 points

- TOTAL 104 points

  Since there are 104 possible points, it should not be a problem if it is necessary to miss a class and miss a weekly quiz. **Late assignments will not be accepted.**

Grading Scale

98-100 = A+	93-97 = A	90-92 = A-	87-89 = B+
83-86 = B	80-82 = B-	60-79 = C	< 60 = F

Attendance

I highly recommend that you attend each class since the daily quizzes cannot be made up. However, there are 104 possible points if it is necessary for you to miss a class.

Class Format

Each 2 hour and 40 minute class will roughly follow this format: 1st hour lecture, 15 minutes for quiz, and remainder of class for lab time.

Academic Honesty

George Mason University has a clearly defined Honor Code and the students in this class are expected to abide by it. If you have any questions about the Honor Code, then please ask. **Code submitted for any assignment for this course must be written by only you.** Code from any other source (e.g., other students, the Internet, etc.) may **not** be submitted. Sharing your code with others is not allowed. **A plagiarism checker will be used in this course on all assignments.** This type of automatic checker looks for code similarities on the structural level from a variety of sources (e.g., the Internet), so detection occurs even if superficial aspects (e.g., variable names) are changed. Honor code violations will be reported to the Honor Committee.