

Syllabus

Graduate Seminar in Algorithmic Composition (206b) (DANM 217)

UC Santa Cruz, Winter, 2014

Revision: 1/28/14

Tuesdays, 4–7, DARC 340

Class website:

<http://eamusic.dartmouth.edu/~larry/classes.html>

Schedule (tentative, will be revised as class progresses)

1/7:

- Introduction to Java, JMSL, Eclipse
 - Introduction to Eclipse
 - workspace, compilation, projects, classes, paths, some useful tools (code formatter, switching between views)
 - some standard views : Outline, Java, console, package explorer
 - Getter/Setter, Extract Method
 - “Do what Eclipse tells you to do!”
 - Fundamental Java principles
 - Main, classes, printing, inheritance, objects, methods, scope, types,
 - Introduction to JMSL
 - data structures (shapes), utilities, MIDI, scoring.
- Project 1 given

1/14:

- More on Java, Eclipse (refactoring), JMSL
 - More on Eclipse features
 - Refactoring,
 - Making a .jar file
 - Utilities project, folder or package
 - Java continued
 - Overriding methods, passing arguments
 - Multiple files (models, makers, etc.)
 - Keeping main small
 - More on JMSL
 - transcribers, shapes, collections, jobs
 - beeperjob example
 - collection launching shapes example
 - more on generating scores
- Some example pieces (“onceatood”)
 - Use of model/maker
 - Simple melodic algorithm
- Project 1 due, in class viewing-listening.
- Project 2 given (more advanced melodic algorithm piece, an actual “piece”)

1/21: Ralph Abraham special guest (first half of class))

- Java: questions, clarifications? More on various code issues
- Project 2 due, in class viewing/listening.
- Final projects assigned

1/28:

- Final projects assigned and described (schedule, parameters)
- More on programming in Java/JMSL: live printing to shapes from various objects, morphing, interpolation. Various pieces explored as examples of different types of compositional/computational ideas.

2/4: Guest Phil Burk, Java-based synthesis

2/11: Guest, Peter Elsea, fuzzy logic. Final project “proposals” due (in writing, to me)

2/18: Guest, Mike Winter. (Mike will also hold individual meetings with students about their work Wednesday and Thursday of that week. Sign-up in class on 2/18)

2/25: Statistical feedback. Ames work discussion? Tenney reading discussion? Guest (one hour of class: Carter Scholz)

3/4: **Unscheduled:** progress reports on final projects (show them in class, briefly)

3/11: Final projects (hear the pieces, see the code)