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
  o 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!”
  o Fundamental Java principles
    ▪ Main, classes, printing, inheritance, objects, methods, scope, types,
  o Introduction to JMSL
    ▪ data structures (shapes), utilities, MIDI, scoring.
• Project 1 given

1/14:
• More on Java, Eclipse (refactoring), JMSL
  o More on Eclipse features
    ▪ Refactoring,
    ▪ Making a .jar file
    ▪ Utilities project, folder or package
  o Java continued
    ▪ Overriding methods, passing arguments
    ▪ Multiple files (models, makers, etc.)
    ▪ Keeping main small
  o More on JMSL
    ▪ transcribers, shapes, collections, jobs
      • beeperjob example
      • collection launching shapes example
    ▪ more on generating scores
• Some example pieces (“onceatood”)
  o Use of model/maker
  o 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)