Data-driven 2D Game Development, Syllabus

Intro Remarks
Syllabus Policies
C++ Basics

SAX XML Parsing with expat
Data Driven Programming

Makefile
Valgrind
Inkscape

Roothing Orb Framework
Static Variables
Singleton

Intro to 2D:
Drawing a surface
Using a game clock
Simple animation

The C++ Class
Constructors
Overloaded Operators
Inheritance
The Model-View-Controller
Design Pattern

The Flyweight and
Factory Method

2D Vector Class
Grammars and L-Systems

Viewport/World
Flyweight and Factory
Packing 2 Sprites

Game Timer
Writing Text

Scrolling Backgrounds
Building a Viewport

Inheritance and
Polymorphism

Parallax Scrolling
Particle Systems
Explosions

Collision Detection

Hierarchical Spatial
Data Structures
Quadtrees

XML Schemas
Validating XML Semantics

Sound and Music
Artificial
Intelligence

Learning Lua

Software Testing

Build a Video Game

Experiment or Study

Inkscape

XML Schemas
Quadtrees
GUI/Menu