# CIS 410/510: Object-Oriented Languages and Systems Spring 2008 Syllabus

Meeting Times:M-W, 2-3:30pm, DES 260

**Instructor:** Yannis Smaragdakis, DES 245, 541-346 3473

yannis@cs.uoregon.edu

Office Hours: right before class or by appointment

**Prerequisites:** You should have knowledge of programming languages equivalent to an undergraduate

PL (survey) course and fluency in at least one OO language.

**Grading:** 50% exams (20%+30% or 15%+15%+20%)

30% homeworks

10% presentation or larger HW (depending on schedule)

10% class participation

### **Other Resources:**

## Web page:

http://www.cs.uoregon.edu/classes/08S/cis410ool/

# **Course Outline:**

The course will cover an extensive sample of work from the Object-Oriented Systems and Languages literature—mostly the OOPSLA and ECOOP conferences. Areas to cover include:

Introduction, contrast of language features in OO languages

Design Patterns—a critical view and analysis

**Aspect-Oriented Programming** 

Language implementation issues: efficient dynamic dispatch, multiple inheritance and object layout, garbage collection for Java

OO Type Systems: parameterization mechanisms for Java, virtual types, module systems

### **Reading Material:**

There is no textbook for this course. I will use papers from the literature and I will pass out my notes.

**Exams:** All exams are closed-books, closed-notes.

Midterm date(s): TBD (make sure you don't miss announcement!)

Final Exam: in regular exam period

## **Homework and Assignment Due Times:**

Non-programming homeworks are due by class time on the due date (either by email before class or as hardcopy in class). Programming homeworks (by email) are due by midnight (11:59pm) of the due date.