

Course Syllabus: Object Oriented Design CS326 Jamrich Hall 3103 1:00-1:50

Instructor: John Sarkela

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Office Hours: 9-10, 3-5 MWThF

## Description:

This course explores the methodologies and practices of object oriented software design. Students will learn Responsibility Driven Analysis and Design, XP, and Scrum practices. All programming assignments will be in the Smalltalk programming language. Design ideas will be expressed using pattern languages, and a book of patterns will be handed in as a final assignment. The examples for the patterns in the pattern book should be expressed in one of Java, Python, C#, C++, or Objective-C.

## Organization:

This course will consist of lecture, written assignments and programming assignments. There will be a mid-term exam and a final exam.

## Course Objectives:

Successful students will be able to:

- use agile development methodologies
- write unit tests
- write and use pattern languages
- read and write use cases, scenarios and object interaction diagrams
- improve designs using code refactoring patterns
- describe key object design patterns
- implement object designs

## Grading:

50% Mid-term and Final Exam

40% Quizzes and written assignments

10% Class participation

## Disability Services:

**If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.**