

Course Syllabus: Object Oriented Design CS326

West Science 2905 10-11 MWF

Instructor: John Sarkela

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Office Hours: TBD

Description:

This course explores the methodologies and practices of object oriented software design. Students will explore issues of project management, software design, testing, and refactoring. Focus will be upon modern agile methodologies. Pattern languages will be extensively used to characterized best practices.

All programming assignments will be in the Smalltalk programming language. Students will be required to submit a book of the patterns they have discovered and learned about during the semester. Code and design patterns in this book should have examples presented in some other object oriented language like Javascript, Python, Ruby, Java etc. Students are free to choose the language(s) they use for pattern examples.

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.