Object-Oriented Modeling and Design

Catalog Description: Modeling and design of complex systems using all views of the Unified Modeling Language (UML). Most effort will be in the problem domain (defining the problem). Some effort will be in the solution domain (producing hardware or software).

Prerequisite(s): ECE 175 or C SC 127A.

Professor: Larry Head, larry@sie.arizona.edu
ENGR 111, +1 520 621-2264
Office Hours: M 3-5 PM, or by appointment (If I am not available, I will let the class know)

Website: Desire2Learn will be used for the class website (http://d2l.arizona.edu)

Class: MWF 12:00 - 12:50, AME 212S


Software: We will use Enterprise Architect (www.sparxsystems.com.au) this semester. All students will be required to do homework and project using Enterprise Architect. I will provide software and installation instructions when we need to start using the software.

Grading: Regular grades are awarded for this course: A B C D E.

- 40% Two (2) Exams
- 20% Final Exam
- 10% Homework
- 10 % Quizzes (bi-weekly)
- 20% Design Project (2 person team)

Reference:
- Cockburn, A., Writing Effective Use Cases, Addison-Wesley, 2001. Rational Unified Process,

http://www.uml.org/

Course Objectives:

Students will understand how to develop models of systems, which may contain software and non-software components, and how to represent these models using the Unified Modeling Language (UML). Students will be able to design systems (software) starting from the business and requirements model (via use cases), to the analysis model, to the design model, to the implementation model and finally to the operational model.