



ECE 435 Software Engineering

Syllabus

1. Details

Fall 2015

Classroom: ECE Room 210, TTh 12:30 – 1:45 am

Instructor: Edward J. Nava

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Office: ECE Rm. 229C

Office Phone: 277-0809

Office Hours: M,W 1:00 – 3:00 PM, or by appointment

Class materials are posted on UNM Learn at <https://learn.unm.edu>

Textbook: Pfleeger, "Software Engineering", 4th Edition, Pearson, 2008.

2. Overview

Welcome to ECE 330, Software Engineering. Engineering is about solving hard problems and throughout your career, you will be tasked to work on challenging problems for which a solution is needed. My objective is to help you to develop skills that will enable you to successfully complete those assignments. The focus of this course is software engineering, but the skills you learn will apply to virtually all projects that you may encounter.

In the course, you will specifically learn about, and apply, methods and techniques used throughout the software development lifecycle. You will improve your ability to develop high quality software which meets the customer's requirements. You will apply concepts, such as decomposition and synthesis, along with abstraction associated with object oriented programming to efficiently implement complex systems.

Course topics will include:

- Software process models.
- Software project planning and management.
- Determining requirements.
- Software architecture and module design principles.
- Coding practices.
- Software testing objectives and execution.
- Software delivery and maintenance.

3. Prerequisites

ECE 330 – Software Design.

ECE 331 – Data Structures and Algorithms.

4. Grading

Grades will be based on quizzes, exams, homework assignments, team projects, and class participation.

An approximate weighting will be 60% for homework and projects and 40% for quizzes and exams. In borderline cases, your class attendance and active participation will be used to determine the final grade outcome.

5. Attendance

You are expected to attend all lectures, as we will discuss material that is not covered in the text or slides. Understanding that sometimes circumstances will require you to miss class, you are directed to notify me by email, before class, if you are going to be absent. In order to maximize everyone's benefit from the class, all phones will be put in silent mode and must be stored out of sight. (Cell phone and laptop calculator functions will not be allowed during any quizzes or tests.)

6. Assignment Submission

Assignments will be turned in per the directions provided when the assignment is issued. Late assignments will generally not be accepted unless prior arrangements have been made. In rare, extenuating circumstances, where prior arrangements have not been made, contact me and I will try and work out an accommodation, if appropriate. In general, I encourage you to start work on assignments early.

7. Academic Honesty

You are expected to do your own work on laboratory and written assignments. You are free, and even encouraged, to discuss *ideas* on implementation. You are not free to share source code, nor use code found on the Internet and claim that it is yours.

When researching how to use specialized functions, you will often come across examples of snippets of code that demonstrate how to use functions. You are allowed to take these sections of code and modify them for your application. Because there is a fuzzy definition of a snippet, I encourage you to note where you found the example.

In sum, cheating will not be tolerated; I expect you to fully comply with the University regulations.

Per the "General Academic Regulations" section of the [University Catalog](#), each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet these standards.

8. Optional Textbooks:

Any additional suggested textbooks will be announced during the course.