

# CSci 780: Advanced Software Engineering

## Where and when

- Class: 9:00-10:15 WF, McGloughlin-Street Hall, Room 108
- Office hours: 10:15-12:00 WF, and by appointment. 140 McGloughlin-Street Hall

## Instructor

- David Coppit (<http://www.cs.wm.edu/~coppit/>, [coppit@cs.wm.edu](mailto:coppit@cs.wm.edu))

## Website

- <http://www.cs.wm.edu/~coppit/csci780/>

## Description

- From the catalog: Research seminar on current topics in software engineering, with an emphasis on software design. Students read and present technical papers from relevant journals and conference proceedings. Synthesis and understanding of materials is demonstrated by a required research project.
- The goals of this course are: (1) to learn about seminal work in software engineering, (2) to learn about today's innovative research, and (3) to learn and practice the activities of a researcher.

## Prerequisites

- Graduate students only

## Books

- **Required:** *The Mythical Man-Month: Essays on Software Engineering* (2nd Edition) by Frederick P. Brooks (0201835959)
- **Suggested:** *Peopeware: Productive Projects and Teams* (2nd Edition) by Tom DeMarco and Timothy Lister (0932633439)

## Course structure

Class will meet twice a week. Course material will be presented by both the instructor and the students. Each class will consist of a lecture on the day's book or paper, followed by a directed discussion on the material. Students will also receive feedback on their teaching from the instructor and their classmates.

Students will be expected to work in pairs on a project in one of the areas we will cover. This project will be "significant" in that it must have some nugget of research, but "small" in that it can be done in 2 months. Students will prepare an NSF-like proposal on their work, then perform the work, then write a research paper on the work, then present the work to their peers.

## **Grading**

### ***Point distribution***

- Class Participation: 10%. If you do not participate in class discussions, I will assume you did not read the paper.
- Paper Presentation: 20%
- Proposal: 15%. 5% for the abstract, 10% for the full proposal.
- Mid-term Project Report: 10%
- Project Research Paper: 25%
- Project Presentation: 20%

### **Students who need accommodation**

- Please see me after class or send email to set up a brief meeting.