SE 181
Intro to Software Engineering
&
Development

Course Overview

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Course Objectives

- Prepare so that you can become a successful member in a software engineering organization.
- Prepare so that eventually you will be able to manage a software engineering activity.
- Understand the Software Engineering profession.
  - How does Software Engineering fit into the world of computing?
  - What do Software Engineers do?
  - What are the issues they deal with?
  - How do they deal with these issues?
  - What do they do well and what do they do poorly?
  - Why "Engineering"?

Course Objectives (cont'd)

- Learn the defining characteristics of various software development process models, their advantages and disadvantages.
- Understand the phases that make up the traditional software development processes.
- Understand the significance of each phase, their current and future limitations.
- Learn how to document and formally present artifacts of the software engineering process.
- Know the IEEE/CS code of ethics for software engineers.

Topics

- The SE Discipline
- SW Process: Structure and Models
- Requirements Development and Specification
- Architectural and Component Design
- Software Implementation
- Software Testing

Instructor Information

Dr. Filippos I. Vokolos
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Office Hours:

- Monday 10AM – 11AM
- Wednesday 11AM – 12PM

Teaching Assistants

- Mr. Reza Moradinezhad rm976@drexel.edu
  Office Hours:
  - Wednesday 10AM– 12PM; Thursday 12PM – 2PM

- Mr. Himanshu Gupta hg387@drexel.edu
  Office Hours:
  - Monday 8PM– 10PM; Tuesday 6PM – 8PM

- Mr. Matthew Chong cc3589@drexel.edu
  Office Hours:
  - Monday 8AM – 10AM; Thursday 6PM – 8PM

Lecture Time and Location

- All lectures will be pre-recorded and made available online, in Blackboard, on the Monday of each week.
- There will be no face-to-face or live-streaming meetings for this course.

Texts

- *Required*:
  Frederick P. Brooks, Jr., *The Mythical Man-Month*, Anniversary Edition, Addison-Wesley

- *Recommended*:
  Roger S. Pressman and Bruce R.Maxim, *Software Engineering – A Practitioner's Approach*, 8th edition, McGraw-Hill.

Term Project

- A term project will provide you with the opportunity to develop a software application using recommended software engineering processes and techniques.
- For this project you will work as a member of a team with four other students.
- You have the option to select a team.
- Students unable to find a team will be assigned to a team by the instructor.

Final Exam

- The Final Exam will be given during Finals Week and will cover material from the entire course.
- Details about the Final Exam will be forthcoming.

Grading

- Grading Policy:
  - Term Project: 60%
  - Exam: 40%
- A corresponding letter grade will be assigned based on the student's calculated score as follows:
  - [95-100] A+ [90-94] A [85-89] A-
    [80-84] B+ [75-79] B [70-74] B-
    [65-69] C+ [60-64] C [55-59] C-
    [50-54] D [00-49] F

Academic Honesty

- Academic Honesty:
  - The university's Academic Honesty policy – as it is described in the Student Handbook -- is in effect for this course.
  - Please make sure you are familiar with this policy.

SE 181: Intro to Software Engineering & Development

Summer 2020

Syllabus

Week	Topics
1 6/22/20	**Course Introduction** **The Software Engineering Discipline** Reading Assignment: Papers P1–P3 6/26/20: Submit Project Team Names 6/28/20: Project Teams Finalized and Announced
2 6/29/20	**The Software Engineering Discipline** Reading Assignment: Papers P4–P7
3 7/6/20	**Software Process: Structure and Models**
4 7/13/20	**Requirements Development and Specification**
5 7/20/20	**Architectural and Component Design** 7/20/20: Requirements Document is due 7/20/20: Midterm Team Evaluation Form is due
6 7/27/20	**Software Implementation** 7/29/20: Design Document is due
7 8/3/20	**Software Testing**
8 8/10/20	**Software Testing** 8/12/20: Test Cases Document is due
9 8/17/20	**Project Management** Reading Assignment: The Mythical Man-Month
10 8/24/20	**Project Demos (Date and time for each group to be provided)** 8/24/20: Final Project Submission is due 8/24/20: Final Team Evaluation Form is due
11 8/31/20	**Final Exam (Date and logistics to be provided)**

Legend: **Lecture topic;** Announcement; Assignment/Deliverable; Evaluation/Exam