

Introduction - Welcome

CS 2212B

Introduction to Software Engineering

Kostas Kontogiannis, Ph.D, P.Eng.

Professor, Computer Science

Welcome

Welcome to the Introduction to Software
Engineering class!

I wholeheartedly wish you a very successful and productive
academic term

Introduction

- Software Engineering is a course that requires some work, but it will reward you not only with theoretical but also with hands-on knowledge in an area which is very much sought after and influences a myriad of applications which affect our every-day life.
- The objectives of this course are:
 - To understand the basic principles, processes, techniques and tools for specifying, designing, implementing, testing, and maintaining software systems
 - To apply these basic principles, processes, techniques and tools through a term-long project with incremental deliverables

About the Instructor

- **Office:** MC 375
- **E-mail:** kkontogi@uwo.ca and cs2212b@uwo.ca
- **Office hours:** Tuesday 9:00 – 10:00 (on-line via Zoom)
Thursday 17:00 – 18:00 (on-line via Zoom)

B.Sc. Applied Mathematics, U. Patras, Greece

M.Sc. Computer Science/AI, KUL, Belgium

Ph.D. Computer Science, McGill University, Canada

PostDoc Computer Science, U. Toronto, Canada

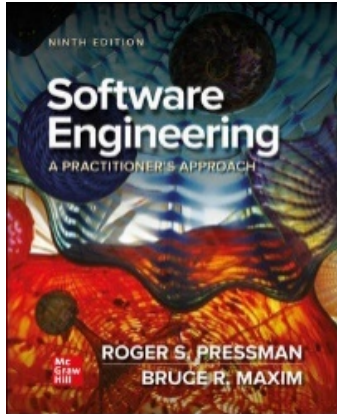
P.Eng. PEO – Software Engineering

Professor U. Waterloo, ECE (1997 – 2007)

NTUA, ECE (2007 – 2016)

Western, Comp. Sci. (2016 –) – Western Research Chair

Textbook - Material



Software Engineering: A Practitioner's Approach

9th Edition

By Roger Pressman and Bruce Maxim

ISBN10: 1259872971

ISBN13: 9781259872976

<https://www.mheducation.com/highered/product/1259872971.html>

The electronic version of the textbook is accessible via the course's Web site on OWL under the "McGraw-Hill Connect" menu option (see left-side banner towards the bottom end). Requires registration with McGraw-Hill.

We will be using OWL to host all the course content.

Eclipse (or a similar IDE of your choice) will be used for software development.

Depending on schedule and availability, DevOps tools such as *BitBucket* and *Microsoft Teams* will be used for group collaboration and source code version control. Instructions will be provided in the class and posted on OWL.

Course Schedule

- Wednesday 10:30 – 11:30 (London ON. time)
- Friday 10:30 – 12:30 (London ON. Time)
- Lectures will asynchronous and will be held on-line on Zoom.
- In asynchronous mode, students watch the lecture videos and study the lecture notes in advance, and during lecture hours the instructor re-iterates and presents the key points, proceeds with discussion, and answers questions.
- Check out the “Zoom” menu option in OWL for the meeting IDs

On-Line material

- The course will be conducted in an on-line asynchronous mode.
- Course content is structured and presented on a week-by-week basis.
- The video lectures, the power point lecture notes, as well as the “live lecture” videos from the Fall offering are posted in advance in OWL so that you can “attend” the lecture and review the material ahead of time.
- During the lecture hours, the instructor will quickly go over selected slides of the material, and students can ask questions related to the video and lecture notes pertaining to the week’s material.
- You also have access to the electronic copy of your text book via the McGraw-Hill Connect menu in OWL.
- Lecture hour meetings and office hour meeting will be conducted via Zoom.
- Zoom meetings have already been set as links to OWL. You can access the Zoom meetings via the Zoom menu on the course’s Web site on OWL.

Owl Resources

← → ↻ owl.uwo.ca/portal/site/9f39fdce-d5e4-4593-b65b-ae44e70c6813 ☆ ⚙️ 👤

OWL Home ▾ ★ Comp. Sci. 9831B ▾ ★ Science of Info Theme 1617 ▾ ☆ COMPSCI 2212B 001 FW20 ▾ Sites Konstantinos ▾

View Site As: ▾ Overview

Site Information Display Edit Link Help

Computer Science 2212B: Introduction to Software Engineering

The informal approaches that most individual programmers use when writing small programs do not work very well when applied to the development of large pieces of software and team programming situations. Software engineering is a discipline that applies principles of traditional engineering to improve software, as well as its development and maintainability.

In this course, we will examine the stages of the software engineering process, including requirements gathering, specification, design, implementation, and testing. We will also cover the practicalities of software engineering, covering a number of the key tools and technologies leveraged in successful endeavours. A large group project, completed by teams of students, will serve to reinforce concepts learned and give students practical experience developing software in a realistic work environment. Programming for this course will be done in Java.

Recent Announcements Link Help

Options

Announcements

(viewing announcements from the last 10 days)

[Welcome CS-2212B - Introduction to Software Engineering](#)
(Konstantinos Kontogiannis - Jan 11, 2021 6:15 pm)

Calendar Link Help

Options Publish (private)

January 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Show all

Overview

- Syllabus
- McGraw-Hill Book Connect Instructions
- Announcements
- Calendar
- Week By Week
- Lectures for Deliverables
- Project Resources
- Assignments
- Tests & Quizzes
- Exam Resources
- Office Hours
- Forums

M_Domaratzki.pdf

Information on how to get access to the electronic version of the book

All pptx and Mp4 lectures organised on a week-by-week basis

The lectures and videos which are most relevant to your deliverables

The Project description and useful resources for the project

The description of each deliverable (D1-D4)

Tests and Quizzes to take on specific dates.

↓ Quizzes ~ 10%

Zoom Links

owl.uwo.ca/portal/site/9f39fdce-d5e4-4593-b65b-ae44e70c6813

Assignments

Tests & Quizzes

Exam Resources

Office Hours

Forums

Zoom

Useful Links

Research Guides

Resources

Statistics

Site Info

Gradebook

Sign-up

Course Readings

Western Exam Chat Support

Help

Link to Zoom lecture hour meetings and office hours meetings

Link to follow for registering to a group

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Message Center Notifications

[New in Forums](#) 5

Gateway | [Help & Support](#) | [Western University](#)

OWL is the learning management system of Western University. It is a customized version of Sakai.
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OWL - OWL - Sakai 11.3-owl6 - Server azuki19

Western

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Show all

Course Email account

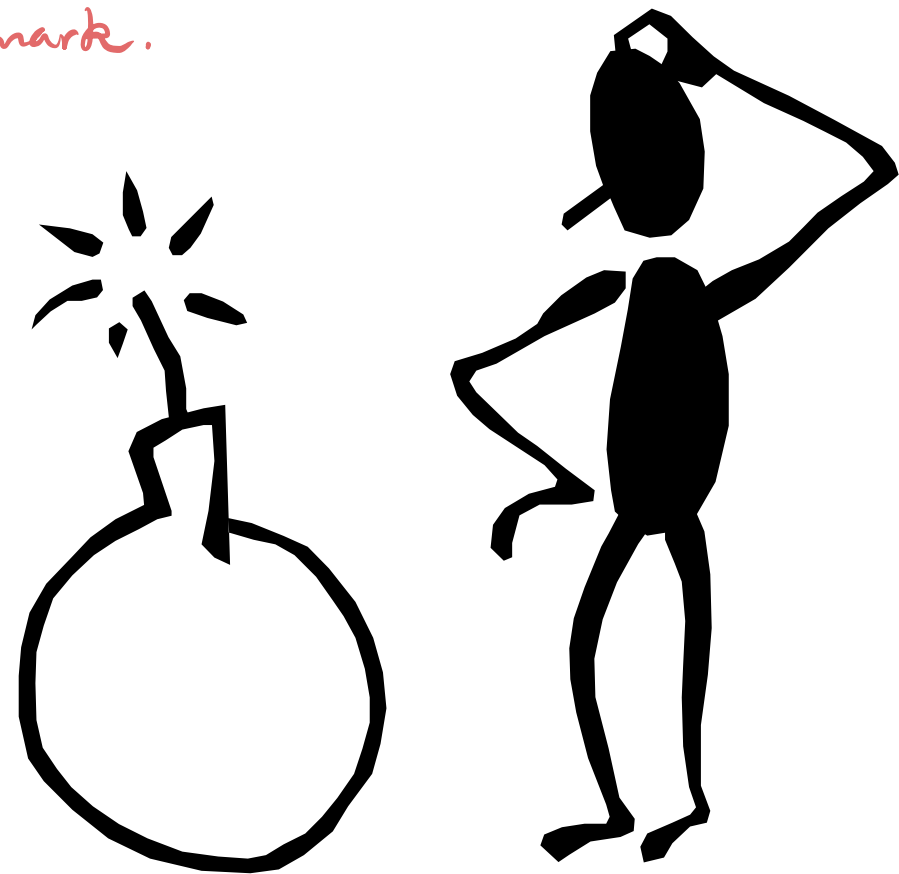
- All course related email inquiries have to be directed to:
cs2212b@uwo.ca

This email account is monitored only by the instructor and the TAs. Please do not send emails to the personal accounts of the instructor or the TAs.

Please send email to the personal email of the instructor only if you require confidential communication

Grading Plan and Project


- Course project: 45%
- Quizzes: 10% (5 short quizzes) *5 question per Quiz. 30min-20% each { 1% participation 120 mark.*
- Midterm: 15% (on-line via Proctortrack or Zoom*)
- Final: 30% (on-line via Proctortrack or Zoom*)
- Course project:
 - Specify, design, and implement a system.
- Teams of three students (please form groups at OWL)
- Four project deliverables:
 - Requirements specifications *SRS* documents (2) (Part 1 & Part 2)
 - Design document *SDD*
 - Implementation (includes acceptance testing)



Subject Material

- **Chapter 1:** Software and Software Engineering
- **Chapter 2:** Process Models
- **Chapter 3:** Agility and Process
- **Chapter 4:** Recommended Process Model
- **Chapter 6:** Principles That Guide Practice
- **Chapter 7:** Understanding Requirements
- **Chapter 8:** Quality Assurance and Testing
- **Chapter 9:** Design Concepts
- **Chapter 10:** Architectural Design—A Recommended Approach
- **Chapter 11:** Component-Level Design
- **Chapter 14:** Pattern-Based Design
- **Chapter 15:** Quality Concepts
- **Chapter 16:** Reviews—A Recommended Approach
- **Chapter 17:** Software Quality Assurance
- **Chapter 19:** Software Testing—Component Level

To-Do Check List for this Week

1. Form groups.
 - Login on OWL and select “Site Info”  “Groups you can join”.
2. Obtain access to the electronic copy of the book
 - Select the “McGraw-Hill Connect Instructions” menu option, download the instructions and follow the registration process
3. Watch the videos and go over the lecture notes and the URL links for the Parts related for Week 1 and 2. So that you will have a heads-up for next week’s lecture hours. You can refer to the Week-by-Week section of the class for which video parts to watch.
4. Checkout the project description. We will discuss it next week.
5. The project will be posted in the next few days. You can start working on it asynchronously.