

COSC 3810 Software Design/Analysis

Spring 2023

INSTRUCTOR

Dr. Sheikh Iqbal Ahamed

Phone: (414) 288-5222

Class room: CU 412

Meets: Tuesdays and Thursdays at 11:00-12:15pm

Office: CU 303

Online Office Hours: M 5:30-6:30pm, TTh 1:00-2:00 (Please make appointment via email)

Email: sheikh.ahamed@marquette.edu

Course URL: D2L (<https://d2l.mu.edu>)

Description

Issues involved in the design and implementation of large software systems. Software lifecycle, software design methodologies, human factors analysis, project management. Prereq: COSC 2100 or COSC 2010.

Text book and

**Software Engineering
By Ian Sommerville
McGraw Hill
Tenth Edition**

Website of the text book: <https://software-engineering-book.com/>

References:

**Software Engineering: A practitioner's approach, seventh edition,
By Roger Pressman
McGraw Hill**

Materials from internet, reference books, papers from IEEE digital library, ACM digital library will be used.

Course Objectives

A student will be able to

- 1) collect and analyze software requirements
- 2) map requirements into a design
- 3) implement a design in a high-level language
- 4) test a design and corresponding implementation
- 5) deploy/release a software system
- 6) maintain a software system
- 7) human factors analysis,
- 8) manage software development project

Computing Facilities

- You will be using computer lab (CU 101 or CU 310)

Communications: Students will be contacted via emails. Homework assignments updates, hints, and items of interest may be distributed by e-mail and on the D2L.

Grading:

- 10% quizzes
- 10% discussion assignments
- 20% assignments
- 36% team project (It will have **3 iterations**)
- 12% midterm exam on **March 7, 2023**
- 12% final exam on **Friday, May 12, 2023 at 3:30-5:30pm**

[96 - 100]	A	[92 – 96)	A-
[88 - 92)	B+	[84 - 88)	B
[80- 84)	B-	[76 - 80)	C+
[72 - 76)	C	[68 - 72)	C-
[64 - 68)	D+	[60 - 64)	D
[0- 60)	F	[0-60)	WF

Late Policy:

Assignments are due at the beginning of the class period. A late assignment will be accepted for two class periods beyond the due date with a 20% penalty for each class period that is late. No assignments will be accepted more than two class periods late.

Honesty:

Unless otherwise stated, all work you turn in must be your own. Your assignments should be completed by YOU without excessive help from anyone. You are encouraged to refer to outside material such as web pages, research papers, white papers and books but you need to cite references and write solutions in your own words.

COVID related link:

<https://www.marquette.edu/coronavirus/faq-top-ten.php>