

University of Guelph – School of Computer Science

CIS*3260 F18 Software Design IV: Course Outline Software Architecture and System Design [0.50]

Lecturer: Dr. Waleed Mohamed
Office Hours: Thurs – 1:15 pm to 2:15 pm REY, ROOM 2206
Email: wmohamed@uoguelph.ca
Lectures: MAC, Room 149 – Tues, Thurs 2:30pm to 3:50pm
Labs: THRN, Room 2420 – Tues, Thurs 4:00pm to 5:20pm
Or THRN, Room 2420 – Monday 2:30-5:20 pm

Textbooks:

Recommended

<i>Software Engineering</i> (10 th Ed) Ian Sommerville Addison-Wesley, 2015	<i>Head First Design Patterns</i> Elisabeth Freeman and Kathy Sierra O'Reilly Media, 2004/2014
<i>Head First Object-Oriented Analysis and Design: A Brain Friendly Guide to OOA&D</i> Brett McLaughlin O'Reilly Media, 2006	

Course Objectives and Topics:

This course is a study of software architectures and system design methodologies. The course has an applied focus, and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.

- OO Design
- Structural UML
- Design Patterns
- Architectural Design
- Software Reuse
- Distributed Soft. Eng.
- Service oriented Architecture
- Best Practice

Requisite Courses:

- CIS*2750
- CIS*3250

Grading:

[30%]	Group Project	
[5%]	PA Project Architecture	(written Architecture document & walkthrough)
[10%]	DD Design	(written design document & walkthrough)
[10%]	IM Implementation	(code, walkthrough)
[5%]	FD Feedback on Design & Implementation	(written design evaluation & reflection)
[25%]	Assignments	
[5%]	A1 Assignment 1	(code and written answers)
[10%]	A2 Assignment 2	(code and written answers)
[10%]	A3 Assignment 3	(code and written answers)

[10%] Readings

[5%]	R1	Reading Part 1	(written answers)
[5%]	R2	Reading Part 2	(written answers)

[35%] Tests

[10%]	MT	Midterm	(written test)
[25%]	F	Final	(written test)

(to pass the course you need a 50% grade or above overall)

Late Policy:

Assignments and Project components:

- There is a 1% late penalty (out of 100%) per every 2 hours up to two days after the due date, after which the assignment/component will be given a grade of zero.

Midterm:

- If you miss the midterm you may write a challenge midterm, which will be given a pass/fail grade. If you pass the challenge midterm, the Final will be worth 34% instead of 24%.

When You Cannot Meet a Course Requirement

- When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course in writing, with your name, id#, and e-mail contact.
- See the undergraduate calendar for information on regulations and procedures for Academic Consideration: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Timetable:

	Classes		Read	Assign	Project	Tests	Readings	Assignmts	Project	Tests
	Tues	Thur					2 PM	2 PM	11:59 PM	
Intro		Sep 06								
W1	Sep 11	Sep 13								
W2	Sep 18	Sep 20			PA				Sun Sep 23	
W3	Sep 25	Sep 27		A1				Thu Sep 27		
W4	Oct 02	Oct 04								
W5		Oct 11			D Design				Sun Oct 14	
W6	Oct 16	Oct 18				MT				Thu Oct 18
W7	Oct 23	Oct 25	R1				Thu Oct 25			
W8	Oct 30	Nov 01			ID & Impl				Sun Nov 04	
W9	Nov 06	Nov 08								
W10	Nov 13	Nov 15		A2				Thu Nov 15		
W11	Nov 20	Nov 22	R2				Thu Nov 22			
W12	Nov 27	Nov 29		A3				Thu Nov 29		
E1						F				Wed Dec 5 (7PM)

E-mail Communication

As per university regulations, all students are required to check their <mail.uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

Drop Date

Courses that are one semester long must be dropped by the end of the fortieth class day; two-semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for [Dropping Courses](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml) (<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>) are available in the Undergraduate Calendar.

Copies of out-of-class assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: www.uoguelph.ca/sas

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The [Academic Calendars](https://www.uoguelph.ca/registrar/calendars) (<https://www.uoguelph.ca/registrar/calendars>) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.