

SYDE 542 – INTERFACE DESIGN (WINTER 2020)
Department of Systems Design Engineering
University of Waterloo

COURSE SYLLABUS

INSTRUCTIONAL TEAM & MEETING TIMES

Instructor: Dr. Siby Samuel

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In-Class: Tuesdays 1:00 pm – 2:20 pm (E5 6004)
 Thursdays 1:30 pm - 2:50 pm (E5 6004)

Office Hours (with Prof. Samuel): Fridays 1 – 2 pm (EC4 2119) [Additional meeting times may be scheduled via email]

COURSE DESCRIPTION

The intent of this course is to give you hands-on experience with some of the current popular techniques, design and research issues in user interface design. As a result, the course teaches concepts, with examples wherever possible, but the evaluation is focused on the students producing a design portfolio that demonstrates multiple phases of an interface design cycle from requirements gathering, storyboard prototyping, less formal review methods, look and feel prototypes, and finally usability testing. While not explicitly a course in usability testing or human-computer interaction, the course provides some review of these ideas but assumes that the students have experience from prior courses or work experience to use these ideas with minimal review. The emphasis is on learning a systematic design process, advanced knowledge elicitation techniques, and objective evaluation techniques and demonstrating competency in these areas.

INTENDED LEARNING OBJECTIVES:

- a) The student will create a design portfolio that demonstrates their skills, abilities, and learning throughout the course.
- b) The student will demonstrate competency in Interface Design methods such as Wireframing, Storyboarding, Prototyping, User Requirements Elicitation Techniques, User Modeling Techniques (Personas, Task Analysis), User Testing
- c) The student will have the opportunity to use Interface Design tools such as Balsamiq or Axure, Usabilla, Design pattern sites, Moodboard creators, Crowd sourced user testing sites.

***Changes may be made to the schedule with appropriate prior notice.**

TENTATIVE COURSE SCHEDULE

	Topic
Week 1	Lecture 1 - Tuesday, Jan 7th
	Introduction
	Overview of Syllabus/Graded Components/Grading Rubric
	Developing a Design Portfolio
	Lecture 2 – Thursday, Jan 9th
	User requirements review (interviews, observations, task analysis, personas, use cases)
	<i>Design Studio 1: Scoping and Planning your portfolio [5 points]</i>
Week 2	No Class on Tuesday, Jan 14th [Away at Conference]
	Knowledge Elicitation <i>[To be done at home]</i>
	No Class on Thursday, Jan 16th [Away at Conference]
Week 3	Lecture 3 – Tuesday, Jan 21st

	No Class
	Thursday, Jan 23rd
	Review of User requirements
	<i>Design Studio 2: User research approaches [Do at home and submit on LEARN] [5 points]</i>
Week 4	Tuesday, Jan 28th
	2-minute Design Idea Pitch [7 points]
	Lecture 4 – Thursday, Jan 30th
	2-minute Design Idea Pitch [7 points]
Week 5	Lecture 5 - Tuesday, Feb 4th
	Concept Mapping (w/exercise)
	Lecture 6 – Thursday, Feb 6th
	Visual aspects of Layouts
	Navigation of Large, unstructured spaces
Week 6	Lecture 7 – Tuesday, Feb 11th
	Design Test 1 [10 points]
	Lecture 8 – Thursday, Feb 13th
	Measurement of Navigation
	Wire framing (w/exercise)
	<i>Design Studio 3: Structuring information [5 points]</i>
Week 7	Tuesday, Feb 18th – Reading Week
	No Class
	Thursday, Feb 20th - Reading Week
	No Class
Week 8	Lecture 9 - Tuesday, Feb 25th
	Mood boards
	Storyboarding
	Thursday, Feb 27th
	Fonts & Typography
	Color
	<i>Design Studio 4: Early design techniques [5 points]</i>
Week 9	Lecture 10 - Tuesday, March 3rd
	Design Test 2 [15 points]
	Lecture 11 - Thursday, March 5th
	Icon Design (w/exercise)
	<i>Design Studio 5: Design refinement [5 points]</i>
Week 10	Lecture 12 – Tuesday, March 10th
	User Testing
	Thursday, March 12th - SYDE Design Symposium
	SYDE Design Symposium
Week 11	Tuesday, March 17th
	<i>Design studio 6: User testing approaches [Not graded]</i>
	Thursday, March 19th
	Design Test 3 [15 points]
Week 12	Tuesday, March 24th
	<i>Portfolio Presentations [28 points]</i>
	Thursday, March 26th
	<i>Portfolio Presentations</i>
Week 13	Tuesday, March 31st
	<i>Portfolio Presentations</i>
	Thursday, April 2nd
	<i>Portfolio Presentations</i>

GRADING BREAKDOWN

Studios	25%
Design Pitch	7%
Portfolio	28%
Design Tests	40%
Total	100%

- STUDIOS (25%)

There are 6 Design studios throughout the term. The first 5 studios are graded at 5 points each. The last studio will not be graded. The studio submissions will be graded for effort, substance, and progress.

Points will be deducted for incomplete work (2 or 3 points will be deducted), no work (no points will be given) or no submission (no points will be given).

Penalties for late submission will be prorated (1 point will be deducted for every day beyond deadline).

Studios are scheduled for following days (**Jan 9th, 23rd; Feb 13th, 27th; Mar 5th**). *Studio sessions 3, 4 and 5 could cover multiple classes.*

- DESIGN PITCH (7%)

All students will participate in a 2-minute Design Pitch. You need to pitch your design idea, design goals and anticipated design steps in no more than 2 minutes. Design Pitches are scheduled for **Jan 28th, Tuesday and Jan 30th, Thursday**.

1 point will be deducted for pitches that exceed the time limit. 1 point each will be deducted for not specifying the idea, goals or anticipated steps.

- PORTFOLIO (28%)

All students will present the specifics of their design portfolio to the class in the form of a 5-6 minute presentation (Detailed assessment rubric will be provided and discussed).

- THREE DESIGN TESTS (1 test of 10% and 2 tests of 15% each; Total 40%)

Three Design Tests will be conducted.

First test on **Tuesday, Feb 11th**.

Second test on **Tuesday, March 3rd**.

Third test on **Thursday, March 19th**.

The tests will be in-class and focus on specific design questions that involve some aspect of the design process.

ESTIMATED WEEKLY COURSE COMMITMENT (7-10 hours as per Faculty of Engineering expectations)

- ~ 3 hours lectures/in-class workshop sessions.
- ~ 2 hours course preparation (readings, tasks) – may vary depending on student's background & experience.
- ~ 5 hours design portfolio – may vary depending on the topic chosen by the student for his/her portfolio. Note that your work must reflect uniqueness and personal learning.

EXPECTATIONS AND TIPS FOR SUCCESS:

Academic Standards: Like any discipline of study, Interface Design has specific vocabulary that should be used accurately, as well as methods and techniques that should be applied competently. To maintain academic integrity, appropriate professional tone and academic referencing are expected on all student submissions and examinations (open-book). Students should be aware that to create design course grading rubrics, we apply the general grading rubric principles that appear in *SYDE 000 Style Manual*.

Class Room Protocol: Students are expected to be courteous and respectful of others, and mindful that a classroom is a shared working space with the primary goal of learning course material. Unnecessary distractions are to be minimized which includes turning off cell phones, laptops (other than course materials) and other distracters during lectures and design activities. If you arrive late then enter through the back door of the classroom and move quietly to the nearest vacant seat when it is appropriate to do so.

Course Assignments & Deliverables (Posting, Submissions, and Feedback): Instructions for course assignments and deliverables will be posted in UW-Learn (SYDE 542). Students will upload relevant documents to appropriate electronic drop boxes. As appropriate, feedback to individuals and teams will be provided electronically. Late submissions will receive a grade of 0; however, feedback will still be provided to help with student learning.

Attendance and Participation Submissions: Students may earn up to a maximum of 10% for Participation Activities. Most individual participation activities will be done at random times during in-class sessions. Some participation activities will be posted to LEARN with specific deadlines. Once the participation activity is asked to be handed in, then that participation opportunity is over. **Remote participation for classroom-based activities is not permitted.**

Deadlines and Late Penalties: Course deliverables submitted after the due date will be assigned a grade of zero (0). *This penalty may be waived at the discretion of the instructor in the event of verifiable exceptional circumstances in keeping with UW policies.*

Absence Due to Special Circumstances or Illness: Let Prof. Samuel know in advance if you need to be away due to special circumstances. If the event conflicts with scheduled design activities, then verification of the reason for absence is needed. In the event of illness that prevents attendance or participation in mandatory course activities, a Health Services Verification of Illness form must be completed by an authorized medical practitioner. See http://www.healthservices.uwaterloo.ca/Health_Services/verification.html.

Communication Methods: Most communications regarding SYDE 542 will be done during class sessions. Special announcements will be posted in the “NEWS Update” section on LEARN. Emails sent to students will be done through LEARN, and sent to UW student accounts. In keeping with SYDE practices, students emailing SYDE 542 Instructional team must use their UW email account and include full student name, and student ID number.

Retention of Student Course Materials: From time to time, we will seek student permission to share work as exemplars of work well done. Any materials shared will follow UW’s privacy and security policies around confidentiality and anonymity.

FACULTY OF ENGINEERING – MORE FINE PRINT

http://www.eng.uwaterloo.ca/~ugoffice/html/course_responsibilities.html

Academic Integrity: To maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [See www.uwaterloo.ca/academicintegrity/ for more information.]

Discipline: A student is expected to know what constitutes academic integrity (see link above) to avoid committing an academic offence, and to take responsibility for their actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g. plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline www.adm.uwaterloo.ca/infosec/Policies/policy71.htm.

Related Links:

Grievance: Read Policy 70, Student Petitions and Grievances, Section 4 www.adm.uwaterloo.ca/infosec/Policies/policy70.htm.

Appeals: Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm.

Note for Students with Disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require accommodation to lessen the impact of your disability, please register with OPD at the beginning of each academic term.