

CIS*6650 – Advanced Interface Design
0.50 Credits – Graduate – Winter 2023
School of Computer Science – University of Guelph

Lectures:

Tuesdays 11:30am-12:50pm, REYN 1101
Thursdays 11:30am-12:50pm, REYN 1101

Instructor:

David Flatla <dflatla@uoguelph.ca>
Office hours: by email appointment

Course Website: <https://courselink.uoguelph.ca/d2l/home/796455>

The course website and uoguelph email will be used for all distributions and all submissions for this course.

Course Calendar Description: This special topics course examines selected, advanced topics in computer science that are not covered by existing courses. The topic(s) will vary depending on the need and the instructor.

Course Overview: This course is intended to help you become familiar with advanced interface design. We will do this as collaboratively as possible, with students identifying, presenting, critiquing, and applying approaches to advanced interface design from leading academic conferences (e.g., CHI, UIST, DIS) and other reputable design repositories (e.g., Medium [?]).

My goal for CIS*6650 this semester is to enable self-directed workloads while maintaining a consistent baseline of weekly work. The entire course will be in-person. There will be no midterm or final exam.

Course Plan: In this course, we will collaboratively explore Advanced Interface Design. Design is all about solving problems, often using an iterative process to move from initial/rough solution ideas to progressively more refined/sophisticated/polished solutions. Interfaces are anything that connect humans with computing technology, including traditional screen-based user interfaces (e.g., windows, icons, menus, pointers, screens, keyboard, mouse), and more recent innovations in touch-based interfaces, as well as tactile-, voice-, gesture-based interfaces. When you start looking, you see interfaces everywhere.

This course is focussed on 'Advanced Interface Design', meaning I want this course to explore relatively recent approaches to designing for these increasingly diverse interfaces. This could mean that we explore how to apply established interface design techniques (e.g., sketching) to new domains (e.g., multi-dimensional visualizations), or explore relatively new ideas for UI design (e.g., Atomic Design and Design Systems). Where the course goes is up to you!

As a student in this course, you will need to select one Advanced Interface Design technique/concept as presented in a recent design-related publication (e.g., from ACM CHI, UIST, DIS) or potentially presented in a design-oriented outlet (e.g., Medium) - I'll call these 'papers', knowing that it can be broader than that. Each week, one student will pick a 'paper' (made available the Friday before), and everyone else will read it and write a short 'Discussion Primer' (due Tuesday) reflection. Then the student who picked the paper will present it to the class (on Tuesday) and lead a workshop (Thursday) in which everyone else practices/does the technique for that week. Then someone else takes over for the next week.

Carefully think through your choice of paper/reading such that it is both: 1) teachable (on Tuesdays) and 2) doable (on Thursdays). The paper should also (of course) highlight a concept directly connected to Advanced Interface Design.

At this point, there are 5 students in CIS*6650, so I am planning that everyone will do this cycle twice - once before Winter Break and once after. You will be graded on your weekly Discussion Primers [as a peer], your Tuesday Presentation(s) [as facilitator], your Thursday Workshop(s) [as facilitator], and your Thursday Workshop weekly output(s) [as a peer].

Anticipated Weekly Work:

1. *Reading [1-2 hours]*: Each week (typically on Fridays), I will make the next week's paper (chosen by next week's facilitator) available to the class. Read this paper.
2. *Write + Submit Discussion Primer [1-2 hours]*: Reflect on the paper you read each week. Then write and submit a Discussion Primer (details below) based on your reading.
Discussion Primers are to be submitted to the appropriate CourseLink submission folder.
3. *Attending Class [3 hours]*: Please commit to coming to class so you can engage in discussions and activities.

Anticipated Semester-Scope Work:

1. *Facilitating two class lectures*: In these you will discuss a concept/approach from Advanced Interface Design. You will be responsible for choosing the paper/topic and facilitating one 120-minute class discussion/lecture twice during the semester – once before Winter Break and once after Winter Break.
2. *Facilitating two class workshops*: In these you will set an exercise for your peers to practice the concept you presented/discussed on Tuesday. You will be responsible for facilitating a Thursday workshop twice during the semester (both following your Tuesday Lecture).

Assessment Details:

Discussion Primer [10 @ 2% each = 20%]: Due at the beginning of each Tuesday Lecture (i.e., by 1130, starting 17 Jan), the Discussion Primer will consist of two questions/comments pertaining to that week's paper. Both questions/comments should pertain directly to the paper; one should reflect a strength of the paper and one should reflect a criticism of the paper. General questions/comments will not count but are welcome as additional questions/comments. Do not summarize the paper, as we all will have read it already.

Facilitated Lecture [2 @ 15% each = 30%]: Twice during the semester, you will need to select and assign an Advanced Interface Design paper/reading. The paper/reading you choose must utilize/showcase an Advanced Interface Design concept or technique. I'm happy to discuss your readings with you prior to you finalizing. Send the paper/reading to me and I will make it available to the class on the Friday prior to the week you are facilitator. The class will read it and create their Discussion Primers. You will then lead a 120-minute lecture the following Tuesday that provides a summary of the paper/readings (10-15 minutes) but is mostly focussed on moving beyond a summary by e.g., showcasing real-world (or generated) examples of the concept/technique, working through a 'worked example' of the concept/technique, or going on a field trip to gather inspiration for Thursday's workshop (details below). I want you to really think broadly about how you can make the Tuesday lecture unique and engaging for everyone else.

Facilitated Workshops [2 @ 15% each = 30%]: Twice during the semester (same week as your Lecture), you will engage your peers in a workshop activity in which they get to practice your chosen concept/technique. The form of these is very open, but I imagine it taking the form of a written or verbal specification summarizing and/or detailing what everyone will do. It would be best if your workshop were more collaborative rather than individuals working in silence the entire time, however you might need to oscillate between periods of collaboration and periods of individual work. You can also have your peers form groups of 2-3 if that is beneficial.

Reflection [part of 'Facilitation' grade]: On the Friday of each week that you are the facilitator, you must provide me with a written summary of your reflection on how the week went (via email). This summary should be focussed on addressing two key themes: 1) What went well? What would you keep next time? and 2) What did not go well? What would you change next time?

Workshop outputs [8 @ 2.5% each = 20%]: For each workshop that you are not the facilitator, the facilitator will assess your outputs from the workshop. I leave it to the facilitator to determine the best means of achieving this, however their feedback must be provided to the student who produced the graded workshop output **plus me** (so I can record their grades). I assume these will tend toward 'student participated in workshop' -> 'student gets 100% on workshop output'.

Grading:

- 5x2 Discussion Primers [10 x 2% each = 20%] (do when you are facilitator too)
- 2 Tuesday presentations [2 x 15% each = 30%] (as facilitator)
- 2 Thursday workshops [2 x 15% each = 30%] (as facilitator)
- 4x2 Thursday workshop outputs [8 x 2.5% each = 20%] (when you're not facilitator)

Course Schedule:

Week (Monday)	Topic or Facilitator	Discussion Primer Due	Lab Due	Paper Posted
00 (09 Jan)	Course Intro	--	--	13 Jan (Week 01)
01 (16 Jan)	Student 1.a	17 Jan	19 Jan	20 Jan (Week 02)
02 (23 Jan)	Student 2.a	24 Jan	26 Jan	27 Jan (Week 03)
03 (30 Jan)	Student 3.a	31 Jan	02 Feb	03 Feb (Week 04)
04 (06 Feb)	Student 4.a	07 Feb	09 Feb	10 Feb (Week 05)
05 (13 Feb)	Student 5.a	14 Feb	16 Feb	24 Feb (Week 06)
<i>WB (20 Feb)</i>	<i>Winter Break</i>	--	--	--
06 (27 Feb)	Student 1.b	28 Feb	02 Mar	03 Mar (Week 07)
07 (06 Mar)	Student 2.b	07 Mar	09 Mar	10 Mar (Week 08)
08 (13 Mar)	Student 3.b	14 Mar	16 Mar	17 Mar (Week 09)
09 (20 Mar)	Student 4.b	21 Mar	23 Mar	24 Mar (Week 10)
10 (27 Mar)	Student 5.b	28 Mar	30 Mar	--
11 (03 Apr)	Course Wrap-up	--	--	--

Late Policy:

Due to the strict weekly synchronization of this class, any assignments submitted after the deadlines outlined above will receive a grade of '0'. However, in cases of extenuating circumstances, please reach out to me via email so we can find a solution.

When You Cannot Meet a Course Requirement:

Please contact me in cases when you are having difficulty meeting a course requirement. This is particularly important if you are unable to attend your own facilitated lecture or workshop. That said, it is another weird and unpredictable semester. If you encounter difficulties completing your coursework, make sure to reach out to me to discuss potential solutions.

Communication (i.e., How to get help...)

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

The best way to get help is to ask questions during lecture. You can also email me at the email address provided above, but my response time is liable to be unpredictable.

Other Notes:

- First day of class is Monday, 09 January 2023 (first lecture is Tuesday, 10 January 2023).
- Winter break (no classes or labs) is 20-24 February 2023.
- Last day of classes is Monday, 10 April 2023 (make-up day for Friday 07 April)
- There is no midterm exam & no final exam for this course.

Drop Date:

Courses that are one semester long must be dropped by the end of the last day of classes. The regulations and procedures for dropping courses are available in the Undergraduate Calendar: <https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Copies of out-of-class assignments:

Keep reliable back-up copies of any work that you do in the course; you may be asked to resubmit your 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 make a booking at least 7 days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time. More information is available at: <http://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. The Academic Misconduct Policy is detailed in the Undergraduate Calendar: <http://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 are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs: <http://www.uoguelph.ca/registrar/calendars/index.cfm?index>

Illness:

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

Disclaimer:

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

For information on current safety protocols, please follow these links:

<https://news.uoguelph.ca/return-to-campus/how-u-of-g-is-preparing-for-your-safe-return/>

<https://news.uoguelph.ca/return-to-campus/spaces/#ClassroomSpaces>

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.