

CIS*6670 Special Topics in Cybersecurity

Summer 2023

School of Computer Science Credit Weight: 0.5 Version 1.00 – May 08, 2023

1 Course Details

1.1 Course Description:

A 12-week experiential learning course that will help students engage with industry in conversations about innovation. This includes weekly **lectures (60 mins)** to build employable skills through lesson and activity (market research, business communication), **socials (30 mins)** to practice networking with peers and volunteer mentors from the local business community, and **seminars (90 mins)** that engage professionals in conversations about industry challenges and opportunities for innovation. This course is a good fit for students looking to develop employable skills, expand their network, and/or exploring potential innovation projects (e.g. Mitacs Accelerate and Mitacs eAccelerate programs).

1.2 Timetable:

Lectures: Thursday: 10am-11am, 120L Classroom, 150 Research Lane. Socials: Thursday: 11am-11:30am, Kitchen/Lounge, 150 Research Lane. Interviews: Thursday: 11:30am-1pm, 120L Classroom, 150 Research Lane.

1.3 Final Exam:

There is no final exam; there is a final **showcase event** where students will be given the opportunity to connect one-on-one with industry, faculty, and other students interested in innovation projects. This will be facilitated through a hybrid networking event featuring poster presentations prepared by those participating in the course.

2 Instructional Support

2.1 Instructor:

Tyler Zemlak, Ph.D.

Email: tzemlak@uoguelph.ca
Office: 120H, Research Park Centre
Office Hours: Tuesdays 12pm-2:30pm

2.2 Instructional Support Team

Graduate Program Assistant: Tricia Waite, Master of Cybersecurity and Threat Intelligence (MCTI).

Graduate Teaching Assistant: TBA.



3 Learning Resources

3.1 Required Resources:

CourseLink (Website)

https://courselink.uoguelph.ca/shared/login/login.html

The CourseLink website will house information related to all components of the course, including course announcements, learning outcomes, resources, lecture notes, gradebook, assignment instructions and grading rubrics.

3.2 Campus Resources:

If you are concerned about any aspect of your academic program

Make an appointment with the Graduate Program Assistant cybergrad@uoguelph.ca

If you are struggling to succeed academically

There is a variety of services that the Learning Commons offers, including time management, working in teams, and writing services. Start by setting-up a meeting with a librarian through the "contact us" page on the library website.

https://www.lib.uoguelph.ca/contact-us/

If you are struggling with personal or health issues

<u>Counselling Services</u> offers individualized appointments to help students work through personal struggles that may be impacting their academic performance.

Health Services is located on campus and is available to provide medical attention.

For support related to stress and anxiety, besides Health Services and Counselling Services, <u>Kathy Somers</u> runs training workshops and one-on-one sessions related to stress management and high performance situations.

If you have a documented disability or think you may have a disability

<u>Student Accessibility Services (SAS)</u>, formerly Centre for Students with Disabilities, can provide services and support for students with a documented learning or physical disability. They can also provide information about how to be tested for a learning disability.



4 Learning Outcomes

4.1 Course Learning Outcomes:

Students will have the opportunity to integrate knowledge and skills developed throughout their program and apply them to real-world situations. By the end of this course, students will develop skills in market research, business communication, and networking. Specifically, by the end of this course, students should be able to:

- 1. Learn and apply best practices for networking with peers and industry professionals.
- 2. Understand growth-mindset and how to practice through self-reflection.
- 3. Use LinkedIn and email to communicate with industry professionals.
- 4. Plan and facilitate interviews with industry professionals.
- 5. Use literature summaries to broaden understanding of a topic.
- 6. Use divergent and convergent thinking exercises to define innovation projects.
- 7. Prepare and pitch a project idea to industry professionals using poster presentation.

5 Teaching and Learning Activities

5.1 Course Content:

This course will start with best practices for problem discovery. It includes lessons and practical exercises aimed at getting students comfortable with outreach, interviewing, and follow-up.

The course will then transition into several weeks of group interviews with industry professionals. The first few will be facilitated by the instructor, but student involvement is encouraged. The facilitation role will then be opened-up to students interested in trying.

At the course mid-point students will direct their energy towards reflection. This reflection will focus on key insights learned during industry interviews. Students will drill down on topics of interest using literature searches and then ideate about potential innovation projects.

The course wraps-up by focusing on setting students up for success after the program. This includes an information session on **Mitacs Accelerate and eAccelerate programs**, grant writing best practices, and tips for preparing an effective poster presentation.

The conclusion is a showcase event where students will be given the opportunity to connect one-on-one with industry, faculty, and other students interested in innovation projects. This will be facilitated through a hybrid networking event where students pitch innovation projects.



5.2 Activity Schedule:

Week	Date	Lecture (60m)	Social (30m)	Seminar (90m)
1	May 11	Orientation	Networking Tips	-
2	May 18	Self-reflection	Social 1	Interview 1
3	May 25	LinkedIn Profile	-	Interview 2
4	Jun 01	LinkedIn Outreach	Social 2	Interview 3
5	Jun 08	Interview Scripts	-	Interview 4
6	Jun 15	Facilitation	Social 3	Interview 5
7	Jun 22	Literature Search	-	Interview 6
8	Jun 29	Ideation	Social 4	Interview 7
9	Jul 06	Poster Presentation	-	Interview 8
10	Jul 13	Showcase Prep	Social 5	-
11	Jul 20	Grant Writing	-	-
12	Aug 04	Showcase	Showcase	Showcase

6 Assessment

6.1 Assessment Details

Reflections (40%)

- A regular practice to build self-awareness and achieve growth.
- Based in Dweck's fixed and growth mindset theory.
- Uses Gibb cycle as a framework.

Assignments (40%)

- Assigned action items to complete by following week.
- Opportunity to apply key lessons learned during lectures.
- Focused on building skills (market research, organization, and communication).

Engagement (20%)

- Experiential learning course and growth/learning will be proportional to the effort you put into your engagement in class activities.
- Plenty of opportunities to engage during lessons, socials, interviews and the showcase.



6.2 Marking Schemes, Details and Distributions

Туре	No.	Description	Due Date	Weight	Learning Outcomes Assessed
Reflection	1	How knowing your values with influence your job search?	May 25	10%	2
Assignment	1	Update professional profile on LinkedIn	Jun 01	8%	3
Assignment	2	Independently set-up an informational interview	Jun 08	8%	3
Reflection	2	During your informational interview what went well & what did not?	Jun 15	10%	2, 4
Reflection	3	During the in-class facilitation exercise what was easy & what was hard?	Jun 22	10%	2, 4
Assignment	3	Create a literature summary for a topic of interest	Jun 29	8%	5
Assignment	4	Complete a continuous improvement project form	Jul 06	8%	6
Assignment	5	Create a poster presentation that pitches an innovation project	Aug 04	8%	7
Reflection	4	How have your networking skills changed over the semester?	Jul 27	10%	1, 2
Total	9	-	-	80%	-

6.3 Course Grading Policies

Accommodation of Religious Obligations

If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements. See the graduate calendar for information on regulations and procedures for <u>Academic Accommodation of Religious Obligations</u>.

Grade

In order to pass the course, students must obtain a grade of 65% or higher on the total mark of all assessments.

7 Course Statements

7.1 Role in Curriculum

This is an experiential learning course. It is designed to allow students to integrate and apply their knowledge of science and further develop skills in problem solving, professional behaviour, communication and teamwork.



7.2 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 instructor (or designated person, such as a teaching assistant) in writing, including your name, ID#, and email contact. See the undergraduate calendar for information on regulations and procedures for <u>Academic Consideration</u>.

Academic consideration, if granted, may consist of an extension on an assignment or a reweighting of remaining assessments, depending on the circumstance.

7.3 Grading

Assignments are due in the CourseLink dropbox by 11:59 pm on the date specified in the instructions. Assignments submitted after the specified date will be subject to a 10% late penalty, per day.

7.4 Regrading

Students who wish to have their assignments regraded must submit their assignment, with their concerns indicated, in writing, within 1 week of the return of the assignment. The entire assignment will be regraded, and the mark may go up, down or remain unchanged; however, the regrade mark must be accepted.

8 University Statements

8.1 Email Communication

As per university regulations, all students are required to check their email account regularly. Email is the official route of communication between the University and its students.

8.2 Drop Date

The regulations and procedures for dropping courses are available in the Undergraduate Calendar. Students wishing to drop one semester courses must do so by the end of the fortieth class day; two semester courses must be dropped by the end of the last day of the add period in the second semester.

8.3 Copies of Out-of-class Assignments

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

8.4 Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services (formerly the Centre for Students with Disabilities), as soon as possible.



For more information, contact <u>Student Accessibility Services</u> at 519-824-4120 ext. 56208 or email csd@uoguelph.ca.

8.5 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 <u>Graduate Calendar</u>.

8.6 Recording of Materials

Recordings that 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.

8.7 Copyright Notice

The course instructor is the copyright owner of the materials provided in this course, unless otherwise stated. Any third party copyrighted materials provided (such as book chapters and articles) have either been licensed for educational use, or are made available to students under an exception in the Canadian Copyright Act.

Copying, posting online, selling copies, or otherwise distributing any of the content provided in this course, may be an infringement of copyright if done without the permission of the copyright owner. Examples of infringing uses of copyrighted works would include uploading materials to commercial course material websites, such as CourseHero, or making copies of significant portions of works, such as textbooks. However, students are permitted, under the fair dealing exception in the Copyright Act, to reproduce short excerpts from copyright- protected materials for purposes such as private study, research, education, criticism and review, with proper attribution.

For more information about students' rights and obligations with respect to copyrighted works, see <u>Fair Dealing Guidance for Students</u>.

8.8 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: https://www.uoguelph.ca/registrar/calendars