University of Western Ontario Faculty of Engineering Centre of Engineering Leadership and Innovation

ELI 9100L - INTELLECTUAL PROPERTY FOR ENGINEERS

COURSE OUTLINE (Summer 2025)

COURSE DESCRIPTION

Innovation and creativity have been and remain at the forefront of activities driving the performance of Canadian economy and promoting productivity growth. With an increasing shift towards technological innovation and entrepreneurship comes the need to protect the intellectual property rights of innovators. From inventions to branding, to software protection and products design, intellectual property laws play an important role in protecting creators and innovators in the knowledge-based economy.

This course will provide engineers with a comprehensive overview of the different types of intellectual property rights and develop their ability to select the appropriate legal tools to protect their activities. Designed to be interactive, this course introduces the core principles related to copyright, trademarks, patented inventions, and industrial design. It explores various strategies for leveraging intellectual property rights to drive commercialization and promote economic growth.

ENROLLMENT RESTRICTIONS

Enrollment in this course is restricted to graduate students in Engineering, as well as any graduate students that has obtained special permission to enroll in this course from the course instructor as well as the Graduate Chair (or equivalent) from the student's home program.

INSTRUCTOR CONTACT INFORMATION

- Course instructor:
- Email address:
- Office hours:

COURSE FORMAT

This course will be taught using a hybrid format. The classes will be held face-to-face through interactive lectures except for 2-3 classes over the summer to be held over zoom. The students will be notified in advance of the online sessions and will receive instructions to access the session platform.

The students are encouraged to use the discussion forum on Brightspace to exchange their ideas and respond to practical examples.

TOPICS

I- Basics of intellectual property

- Historical background and source of intellectual property laws
- Types of intellectual property and their rationale.
- Role of intellectual property in today's economy

II- Copyright and related rights

- Types of works
- Types of rights: economic and moral rights
- Authorship, ownership and collective administration of rights
- Copyright infringement

III- Patents

- Patentable Subject Matter
- Patentability requirements: Novelty, Obviousness and Utility
- Inventorship, Ownership and assignment of rights
- Patent prosecution and filing strategies
- Industrial Designs and Design Patents
- Confidential Information (Trade Secrets)

IV-Trademarks

- Function and types of marks
- Requirement of protection
- Registration process, opposition and expungement
- Protection of unregistered trademarks
- Domain Names
- Trademark infringement

V- Management of intellectual property rights

- Intellectual Property Strategy (focus on patent and trademark strategies)
- Intellectual property culture and the role of senior leadership
- Collaborative intellectual property sharing

Learning Outcomes:

By the end of this course, students should be able to:

- 1. Describe the various types of intellectual property rights and their rationale, subject matter, and limitations/exceptions.
- 2. Explain the appropriate steps to ensure various forms of intellectual property protection, including patent searching concepts, trademarks, and domain names registration.
- 3. Recognize the different strategies for deriving value from IP rights.
- 4. Develop their professional skills in situation assessment and preparing IP strategies.

ASSESSMENTS

To pass the course, a student must obtain an overall grade of 60% or higher. The weight for each component is shown below:

- 10% of your final grade --- Participation and Engagement in classes and discussion forum on Brightspace. Class attendance is required, and students are expected to review the reading materials in advance, come to class prepared to discuss the assigned reading materials. Students are encouraged to ask questions, share experiences, and related course material.
- 30% Mid-term Examination (multiple choice questions)
- 60% Final Examination

READING MATERIALS

All required readings and resources for this course are <u>freely accessible online</u>. Please review the following guidelines and expectations:

1. Open-Access Resources

The syllabus lists open access materials including articles, government reports, case studies, and digital platforms that are available online.

2. Lecture Slides

PowerPoint slides will be uploaded to Brightspace after each class. You may download these for reference, but they are not substitutes for completing the readings.

3. Recording Policy

Recording live sessions is strictly prohibited without the instructor's written permission. Unauthorized distribution or posting of course content may lead to disciplinary or legal action.

4. Preparation and Participation

Students must complete assigned readings *before* each class and come prepared to discuss key themes, cases, and examples. Active engagement in debates enriches everyone's learning experience.

5. Weekly Schedule

A detailed weekly plan with links to readings, multimedia resources, and in-class activities will be available under **Course Content - Weekly Planning** on Brightspace.

6. Virtual Discussion Forum

Use the Brightspace discussion forum to exchange ideas, pose questions about readings, and share relevant case law or examples. Constructive online dialogue complements the in-class discussions.

If students need assistance with OWL Brightspace, they can seek support on the OWL Brightspace Help page. Alternatively, they can contact the Western Technology Services Helpdesk online or by phone at 519-661-3800 or ext. 83800 for technical support. Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

CHEATING, PLAGIARISM/ACADEMIC OFFENCES

Academic integrity is an essential component of learning activities. Students must have a clear understanding of the course activities in which they are expected to work alone (and what working alone implies) and the activities in which they can collaborate or seek help; see information above and ask instructor for clarification if needed. Any unauthorized forms of help-seeking or collaboration will be considered an academic offense. University policy states that cheating is an academic offence. If you are caught cheating, there will be no second warning. Students must write their essays and assignments in their own words. Whenever students take an idea or a passage of text from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence. Academic offences are taken seriously and attended by academic penalties which may include expulsion from the program. Students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence at the following website: https://www.uwo.ca/univsec/pdf/academic policies/appeals/scholastic discipline grad.pdf

CONDUCT

Attendance is mandatory for this class and an absence is an absence, regardless of the reason, except for those covered by the Faculty of Engineering policy. Irregular attendance may affect your participation grade.

Students are expected to arrive at lectures on time, and to conduct themselves during class in a professional and respectful manner that is not disruptive to others. Latecomers may be asked to wait outside the classroom until being invited in by the instructor.

Students are expected to follow proper etiquette to maintain an appropriate and respectful academic environment. Any student who, in the opinion of the instructor, is not appropriately participating in course activities and/or is not following the rules and responsibilities associated with the course activities, will be reported to the Associate Dean (Graduate) (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Associate Dean (Graduate), the student could be debarred from completing the assessment activities in the course as appropriate.

HEALTH/WELLNESS SERVICES

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several health and wellness related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. Information regarding health- and wellness-related services available to students may be found at http://www.health.uwo.ca/.

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), or other relevant administrators in their unit. Faculty of Engineering has a Student Wellness Counsellor. To schedule an appointment with the counsellor, contact Kristen Edwards (khunt29@uwo.ca) via confidential email and you will be contacted by our intake office within 48 hours to schedule an appointment.

Students who are in emotional/mental distress should refer to Mental Health Support at https://www.uwo.ca/health/psych/index.html for a complete list of options about how to obtain help.

SICKNESS

Students should immediately consult with the Instructor (for a particular course) or Associate Chair (Graduate) (for a range of courses) if they have problems that could affect their performance. The student should seek advice from the Instructor or Associate Chair (Graduate) regarding how best to deal with the problem. Failure to notify the Instructor or the Associate Chair (Graduate) immediately (or as soon as possible thereafter) will have a negative effect on any appeal. Obtaining appropriate documentation (e.g., a note from the doctor) is valuable when asking for accommodation due to illness.

Students who are not able to meet certain academic responsibilities due to medical, compassionate or other legitimate reason(s), could request for academic consideration. The Graduate Academic Accommodation Policy and Procedure details are available at:

 $\underline{https://www.eng.uwo.ca/graduate/current-students/academic-support-and-accommodations/index.html}$

Please note that any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.

ACCESSIBLE EDUCATION WESTERN (AEW)

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program. Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW): http://academicsupport.uwo.ca/accessible-education/index.html

AEW is a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.

STATEMENT ON GENDER-BASED AND SEXUAL VIOLENCE

Western is committed to working to end gender-based and sexual violence on campus and in our community and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced gender-based or sexual violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts, here. To connect with a case manager or set up an appointment, please contact support@uwo.ca.

USE OF GENERATIVE ARTIFICIAL INTELLIGENCE (AI)

Students are not permitted to use any generative artificial intelligence tools/software/apps, including ChatGPT, Gemini, Claude, Microsoft Copilot and other AI writing and coding assistants, to complete their mid-term and final exams in this course. Representing an AI generated work as your own may be considered an academic offense in this course. The assignments submitted for this course must be original work produced by the individual student alone.