

COURSE OUTLINES (SYLLABI) FOR UNDERGRADUATE COURSES**CS2209 Course Outline
APPLIED LOGIC FOR COMPUTER SCIENCE, Jan-Apr of 2025****1. Course Information****Course Information**

The course is an introduction to applied logic for computer science. We will cover propositional and predicate logic; representation of static and dynamic properties of real-world systems; logic as a tool for representation, reasoning and calculation; logic and programming, and so on.

List of Prerequisites

Either 1) Computer Science 1027A/B, Computer Science 1037A/B, Computer Science 2101A/B, Computer Science 2121A/B or Digital Humanities 2221A/B in each case with at least 65%, and 1.0 course with at least 60% in each from: Applied Mathematics 1201A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Calculus 1000A/B, Calculus 1301A/B, Calculus 1500A/B, Calculus 1501A/B, Mathematics 1600A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413; or 2) Integrated Science 1001X with at least 60%.

Unless you have either the requisites for this course or written special permission from your Dean's Designate (Department/Program Counsellors and Science Academic Counselling) to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Dr. Charles Ling, Professor of Computer Science

Email: charles.ling@uwo.ca (preferred way of contact). Students must use their Western (@uwo.ca) email addresses when contacting instructors and TAs.

Dr. Ling's office hours: [REDACTED]

3. Course Schedule

Key Sessional Dates:

- Classes begin: January 6, 2025

- Spring Reading Week: February 17 – 21, 2025
- Classes end: April 4, 2025
- Exam period: April 7 – 30, 2025

4. Course Materials

Textbook:

Introduction to Logic, By Prof. Harry Gensler. **It is available online (free) for UWO students.** Read the book online [here](#). The PDF version can also be found [here](#).

A great advantage of using this book is that there is an excellent free software called [LogiCola](#) by the author of the textbook for practice and exercise. Additional materials will be posted and used in the course.

Students are responsible for checking the course OWL site on a regular basis for news and updates.

In the course OWL site, you will find a Homepage for this course. It contains links to ALL course resources (lecture notes, Assignments, etc). Please check the Homepage often.

In addition, when the TAs and instructor receive multiple emails about the same/similar questions, we will send out an Announcement via OWL, instead of replying to every email. Please review Announcements in OWL regularly.

Tutorial sessions are just Q&A sessions run by TAs. Attending Tutorial sessions are not mandatory and no marks are given to them. Please try to go to your chosen tutorials at least for the first few weeks. If you need to go to the Tutorial sessions, please be there in the first half hour of the session. TAs may leave if no students come after the first half an hour.

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

5. Methods of Evaluation

- Four assignments: the first one is 2%, and then 6% for the remaining three
- All assignments are due by 11:55 pm of the due date, submitted via OWL. The four assignment due days are: 1/31, 2/14, 3/14, 4/4
- Midterm (in-class): 30%, Feb 28 (Friday), 2025
- Final Exam (3-hour): 50% (covering the whole term). Date/room TBD
- For both midterm and final exams, students can bring a one-page 8x11 “cheat sheet” (double-sided, written or printed). The exam will be closed book, with no permitted

access to electronic devices. The exam is to be completed individually, with no assistance from others.

Late Assignment Policy of assignments:

Each day (24 hours) is 10% off (e.g., if late for 2 days, 20% off), until 10 days have passed and the assignment will be worth 0.

General information about missed coursework

Students must familiarize themselves with the *University Policy on Academic Consideration – Undergraduate Students in First Entry Programs* posted on the Academic Calendar:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf,

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult [Accessible Education](#).

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage:

https://registrar.uwo.ca/academics/academic_considerations/

All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline.

All Academic Consideration requests must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make one Academic Consideration request **without supporting documentation** in this course. However, the following assessments are excluded from this, and therefore always require formal supporting documentation:

- **Midterm and Final Exams**

Students may use the Academic Consideration without supporting documentation on one of the assignments, and if so, their missing assignment would be given the average grade of other assignments.

Evaluation Scheme for Missed Assessments

If you must miss the Midterm Exam for a valid reason, you must also notify the course instructor prior to the Midterm Exam. A make-up Midterm will be arranged for these students.

When a student misses the Final Exam and their Academic Consideration has been granted, they will be allowed to write the Special Examination (the name given by the University to a makeup Final Exam). See the Academic Calendar for details (under [Special Examinations](#)), especially for those who miss multiple final exams within one examination period.

If for any reason the assignment schedule given below cannot be adhered to, the assignment marks will be prorated.

6. Additional Statements

Religious Accommodation

When conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible but not later than two weeks prior to the writing or the examination (or one week prior to the writing of the test).

Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

<https://www.edi.uwo.ca>.

Accommodation Policies

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf.

Academic Policies

The website for Registrar Services is <https://www.registrar.uwo.ca/>.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Support Services

Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic-related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (<https://learning.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Additional student-run support services are offered by the USC, <https://westernusc.ca/services/>.