

CISC204, Logic for Computing Science: Course Syllabus

Calendar Description:

Elements of mathematical logic with computing applications. Formal proof systems for propositional and predicate logic. Interpretations, validity, and satisfiability. Introduction to soundness, completeness and decidability.

Learning Outcomes:

Program Code	Learning Outcome
2.1	Construct syntactic and semantic proofs in propositional and predicate logic
3.1	Express English language and mathematical expressions in logic
	Determine semantic equivalences, satisfiability and validity
2.1	Verify the correctness of computer programs
	Apply model checking for verification

Textbook:

The textbook for this course is *Logic in Computer Science: Modelling and Reasoning about Systems* by Huth & Ryan, 2004 (ISBN 978-0521543101, pub. Cambridge University Press). We will cover, from the text: all of Chapter 1; all of Chapter 2; some of Chapter 3; some of Chapter 4; and some of Chapter 5.

We will provide additional instructional material as needed and as appropriate.

Grading Method:

There will be 5 in-class tests, graded numerically. All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's official grade conversion scale.

The grading scheme includes considerations for short-term health concerns, scheduling difficulties, variable performance, and misfortune. For the first 4 tests, the highest 3 test results will be worth 27% each or 81% of the final grade; the fifth test will be worth 19% of the final grade. Because of this policy, and the attendance requirements of Academic Regulation 6.1, ***no make-up or re-write tests*** will be offered.

If you find a discrepancy between the grade on your test paper and the grade entered in onQ, you must email the instructor or a graduate TA *no later than one week after the marked test is returned*. After one week, your onQ grade will not be altered for any reason.

If you have any question about your mark, please fill out the online form. Include the form and your marked test in an envelope and hand them in to the instructor *no later than one week after the marked test is returned*. Your entire test will then be re-marked and, as a result, your mark may go up or down, or remain unchanged. No request for a re-mark will be considered if your answers were written in *pencil* or *erasable ink*.

Test Schedule:

The 5 in-class tests are planned to occur on the second class of a calendar week:

Test #1:	Sept 26	Week 3	Wednesday
Test #2:	Oct 12	Week 5	Friday
Test #3:	Oct 31	Week 8	Wednesday
Test #4:	Nov 14	Week 10	Wednesday
Test #5:	Nov 28	Week 12	Wednesday

Additional Syllabus Information

Please see the course's "Syllabus Addendum" for additional information on academic integrity, accommodation requests, extenuating circumstances, and relevant copyright protection.

Addendum to Syllabus

This addendum references relevant policies of the Faculty of Arts and Science at Queen's University.

Academic Integrity

The Faculty of Arts and Science principle of academic integrity has six core values: honesty, trust, fairness, respect, responsibility, and courage (see AcademicIntegrity.org). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the “freedom of inquiry and exchange of ideas” essential to the intellectual life of the University (see the Senate Report on Principles and Priorities).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1) on the Arts and Science website, and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Although collaboration between students in discussing and understanding ideas related to this course is encouraged, violation of Regulation 1 will not be tolerated.

Accommodation Requests:

Please contact the instructor if you need special accommodation. The Faculty of Arts and Science Academic Regulation 6.3 provides guidelines on accommodation.

Academic Considerations for Students in Extenuating Circumstances:

There is a Senate Policy on academic consideration for students in extenuating circumstances. Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances that are beyond their control and which have a direct and substantial impact on their ability to meet essential academic requirements. The Faculty of Arts and Science has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances, which is available on the Faculty of Arts and Science website.

Automatic Copyright of Course Materials:

As recommended by the University, this is a reminder to students of copyright:

In accordance with Canadian statutory and common law, any written or visual material that the instructor produces is automatically copyrighted. The instructor may pursue any violator of that copyright whether or not a notice is placed on the course material. Copyright does not dampen any ordinary use that colleagues or students make of the material.