MATH 2155F: MATHEMATICAL STRUCTURES (FALL 2016)

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Class. MWF 2:30–3:30pm, MC 105B

Textbook.
M. Beck, R. Geoghegan, The art of proof, Springer, New York 2010
`http://link.springer.com/book/10.1007/978-1-4419-7023-7`
 From within the UWO intranet, the book can be downloaded for free.

Prerequisites. 1.0 course from: Mathematics 1120A/B, 1600A/B, Applied Mathematics 1413, Calculus 1000A/B, 1500A/B, 1301A/B, 1501A/B, or the former Calculus 1100A/B, in each case with a minimum mark of 60%; or permission of the department.

Antirequisites. Mathematics 2151A/B, the former Software Engineering 2251A/B, the former Mathematics 2155A/B.

Course Description. This course provides an introduction to logical reasoning and proofs. Topics include sets, counting, mathematical induction, relations and functions, partial order relations, equivalence relations, binary operations, elementary group theory, and applications to error-correcting codes or public-key cryptography.

Evaluation of Student Performance.

Quizzes. Four quizzes, written in class, together worth 15% of the final grade.

Midterm Examination. A midterm exam, worth 35% of the final grade.

Final Examination. A final exam, worth 50% of the final grade.

Assignments. There will be homework assignment, at least every two weeks. They may be graded, but the grades only serve as feedback; they will not affect the final grade. Solving the exercises is strongly recommended as this is the best (and probably the only) way to understand the material. It is also a very good preparation for the exams.
 Solutions will not be graded if they consist of scrap paper, are not clearly and carefully written or if they are not stapled. Discussion of exercises and solutions during tutorials or office hours may be limited to students who have handed in non-negligible solutions (which are not required to be correct).

Regarding Scholastic Offences and Penalties, see the Section "Scholastic discipline for undergraduate students" of the Academic Calendar. Note that these rules apply to homework as well as to midterm and final exams.

Electronic devices (including cell phones and ipods) are not allowed at the exams and may be confiscated. The mere possession of such devices may already be considered an academic offence.

Make-up exams and conflicts.

For the midterm exam. In the event that you must miss the midterm due to a valid conflict, the make-up exam may be given before the regular exam. Usually this will be earlier on the same day, or on the day before. If you are in this situation, you must let the instructor know at least two weeks before the exam date.

If you miss the midterm due to illness, you must present a doctor's note to the appropriate Dean's office, and you may be given a make-up exam as soon as possible after the regular exam. If you are in this situation, you should contact your instructor as soon as you realize that you will miss the exam.

For the final exam. If you have a conflict with another final exam, you must contact Rob Downes in the Registrar's office by mid November to arrange a special time/place to write the final.

If you have a conflict with a midterm for a year-long course, you must contact the instructor of the other course.

If you have three final exams in 3 consecutive periods, you must contact the Dean of your faculty.

In all case, please let your instructor know.

If we need to give you a make-up exam, it will be given before the regular exam. If you miss an exam due to illness, you must present a doctor's note to the appropriate Dean's office, and you will be given a make-up exam as soon as possible after the regular exam. If you are in this situation, you should contact your instructor as soon as you realize that you will miss the exam.

Failure to follow these rules may result in a grade of zero.

See also the University's policy on final exam conflicts.

Accessibility Statement. Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 for any specific question regarding an accommodation.