Math 2155F: Mathematical Structures

(Fall 2017)

Essential information

• Lectures: MWF 2:30-3:30, NS7.

• Office hours: M 12:30-1:30, W 12:30-1:30 and 3:30-4:30.

Instructor: <u>Chris Kapulkin</u>Email: kkapulki (at) uwo.ca

• Office: MC 116

• Teaching assistants: Brandon Doherty, Alex Rolle, and Luis Scoccola

• **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.

Textbook

The course will follow:

• Smith, Eggen, St. Andre, A Transition to Advanced Mathematics, Edition 8 (2014).

Course content

The topics will include:

- propositional logic and set theory
- proof techniques (e.g., mathematical induction)
- functions and relations (equivalence relations, order relations)
- elementary abstract algebra

Evaluation

The final grades will be based on the following components:

weekly quizzes: 15%weekly assignments: 15%

• midterm: 20%

• final: 50%

Midterm exam

Date: November 3, 2017

• Time: 7-9 PM

• Location (depending on the last name):

EC 2168A: A-JEC 2168B: K-Z

Final exam

Date: December 12, 2017

Time: 7-10 PMLocation: TBA

Assignments

Problem sets will be assigned weekly on Fridays, due at 2:30 PM the following Friday. Late assignments will **not** be accepted.

While working on the assignment, you are allowed to use your textbook and course notes. You are also allowed and, in fact, encouraged to ask the instructor and the teaching assistants for clarification and help. Make sure your submission follows the Math 2155F style guidelines.

However, you are **not allowed** to discuss the problems with anyone else, including your fellow students, nor are you allowed to use any additional resources (other texts or online resources).

Accommodation and Accesibility

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or supporting documentation to the Academic Counselling Office of your home faculty as soon as possible. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in WSC 140, and can be contacted at scibmsac@uwo.ca.

For further information, please consult the university's medical illness policy at

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

If *homework* is missed and sufficient documentation is provided, the homework can be handed in later. If a *quiz* or an *exam* is missed and sufficient documentation is provided, a make-up exam will be offered. In each case, the permission to do so must be granted by the student's Dean's Office/Academic Counselling. Failure to follow these rules may result in a grade of zero.

If you miss the Midterm or Final Exam, please contact your faculty's Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam). You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation"

http://www.registrar.uwo.ca/examinations/exam_schedule.html

Academic Policies

The website for Registrarial Services is http://www.registrar.uwo.ca.

In accordance with policy, http://www.uwo.ca/its/identity/activatenonstudent.html, 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 his/her 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 this website:

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

Support Services

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 Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation. The policy on Accommodation for Students with Disabilities can be found here:

www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_disabilities.pdf.

The policy on Accommodation for Religious Holidays can be found here:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf.

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