

The University of Western Ontario
Department of Mathematics

MATH 2124A - Introduction to Mathematical Problems Fall 2018

Time and Location: Tu 12:30 – 13:30 and Th 12:30 – 14:30, room NCB - 295.

Instructor: Martin Pinsonnault

Office: MC 132

E-mail: mpinson@uwo.ca

Office Hours: TBA

Course website: Enrolled students must consult the OWL website to check for announcements and to access supplementary material.

Prerequisites: Calculus 1501A/B or Applied Mathematics 1413, with a minimum mark of 60%, or Calculus 1301A/B with a minimum mark of 85% or permission of the instructor.

Course Outline: Primarily for Mathematics students, but will interest other students with ability in and curiosity about mathematics in the modern world as well as in the past. Stresses development of students' abilities to solve problems and construct proofs. Topics will be selected from: counting, recurrence, induction; number theory; graph theory; parity, symmetry; geometry.

Textbook: The course will be based on

- Zeitz, Paul; *The Art and Craft of Problem Solving*, Second Edition, published by Wiley.

This textbook is available at the bookstore. It should be possible to find used copies as well.

What is expected of the student: Students are expected to attend all lectures and complete all tests, assignments, and examinations. No aids are permitted in tests and examinations. Regular homework is an essential part of the course; it is the student's responsibility to keep up with the assigned homework and to seek additional help if and when it is needed.

Important Note: This course differs from other mathematics courses in that it is not based on a specific body of knowledge but, instead, focusses on the processes involved in solving problems which incorporate mathematical constructs. Consequently, active participation of each student is necessary to make the course interesting and rewarding.

Evaluation: The evaluation will be based on

- Assignments: 30%;
- Midterm: 30%; Tentative date: October 24, 19h00–21h00.
- Final Examination: 40%

No calculators or other electronic devices or any other aids are allowed on tests and exams.

If you are unable to attend the midterm due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to the Dean's office as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor. For further information please see

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

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

Accessibility: 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.

Health and Wellness: As part of a successful student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your degree. Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

Key sessional dates – Fall 2017:

Sept. 06	Classes begin
Sept. 14	Last day to add a full course or first-term half course
Oct. 08	Thanksgiving (University closed)
Oct. 08–12	Fall Reading Week
Nov. 05	Date by which students in a first-term half course must receive assessment for work totaling 15% of their final grade
Nov. 12	Last day to withdraw from a first-term half course without academic penalty
Dec. 07	Last day of classes in Fall Term
Dec. 08–09	Study Day
Dec. 10–21	December examination period