

**MATH 392**  
Elementary Number Theory  
*Winter 2024*

**Instructor:** Dr. G. Rosso, Office: LB 927.11 (SGW), Phone: 848-2424, Ext. 3985  
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**Class Schedule:** Mondays & Wednesdays, 16:15-17:30.

**Office Hours:** Mondays, 15:15-16:15; Wednesdays, 14:00-14:30.

**Moodle:** Important information about the course will be posted on Moodle; please check it frequently.

**Textbook:** Elementary Number Theory, by Kenneth H. Rosen (Suggested).

**Midterm:** **There will be one during-class midterm in the middle of the course.**  
We will decide on a date via a poll on Moodle.

<b>Final Grade:</b>	Mid-term exam	30%
	Final	50%
	Assignments	20%

If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

**Content:** Topics to be covered:

- Euclidean algorithm, gcd, lcm, primes, fundamental theorems of arithmetic;
- congruences, solving linear congruences, Chinese remainder theorem, higher order congruences;
- quadratic reciprocity;
- factorisation, primality testing;
- diophantine equations.

**Academic Integrity and the Academic Code of Conduct**

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: <https://www.concordia.ca/conduct/academic-integrity.html>" [*Undergraduate Calendar, Sec 17.10.2*]

**Behaviour**

All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications.

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In the event of extraordinary circumstances and pursuant to the [Academic Regulations](#) the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the change.