Course Information:

Lectures: TTh 10:30 – 11:50 a.m., ESC 109
Recitations: Tuesdays, 7:00 – 8:00 p.m., ESC 638 (to be confirmed)
Office Hours: MW 3:00 – 4:00 p.m. and by appointment, ESC 649

Instructor: Christopher Rasmussen
crasmussen@wesleyan.edu
Phone: ×2315
Office: ESC 649

Teaching Assistant: TBA

Graders:
Brenna Sansom (bsansom@wesleyan.edu)
TBA


Goal: Most of the mathematics you have learned in the calculus sequence has dealt with continuous functions of a real variable (or variables). Notions such as limits, derivatives and integrals all rely on the nature of the real line forming a continuum. In the present course, we will instead focus on discrete structures, such as the set of integers, and discrete processes, such as enumeration. Topics covered will include set theory, relations, function theory, and possibly number theory.

In addition, this course will train students in mathematical rigor. We will examine the logic and methods of mathematical argument. There will be emphasis on how mathematics is written, spoken and read, and students will learn the correct style and structure of mathematical proof. We will cover several standard strategies for proving mathematical claims. Since the goal of written mathematics is to communicate an idea to another, please note that your written work on homework and exams will be graded for correctness, clarity, and completeness.

Office Hours: Throughout the semester, I will hold weekly office hours to answer any questions about the course material. I am also happy to meet with students at other times, but please make an appointment with me in advance if possible.

Attendance: Students are expected to attend every class. Further, it is the student’s responsibility to keep informed of any announcements, syllabus adjustments, or policy changes made during scheduled classes.

You are responsible for all announcements made in class.
Homework: Homework will be assigned regularly and collected each Thursday at the start of class. Selected problems from the assignment will be graded; however, you are responsible for understanding all the problems on the assignment. No late homework will be accepted. Your lowest weekly homework score will be dropped and all others will be averaged to determine your final homework grade.

For homework, you are encouraged to work together to find solutions. Discussing mathematics with another person will improve your understanding and help eliminate confusion. However, each student must write up his or her assignment individually, in their own voice or style. Identical or near-identical solutions from multiple students will be considered an act of plagiarism and referred to the Honor Board as a suspected violation of the Honor Code.

Exams: This course will have two mid-term exams and one final exam. They are scheduled as follows:

- **Midterm I**  Thursday, February 28, 7:00 – 10:00 p.m.
- **Midterm II**  Thursday, April 18, 7:00 – 10:00 p.m.
- **Final Exam**  Thursday, May 16, 7:00 – 10:00 p.m.

If you have a scheduling conflict with a midterm exam, please contact me at least one week in advance so that we may make alternative arrangements. The scheduled time for the final is set by the registrar and cannot be changed.

Grading: Your final course grade will be determined from your grades on homework, midterm exams, and the final exam, as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm I</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm II</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35%</td>
</tr>
</tbody>
</table>

Disability Support: It is the policy of Wesleyan University to provide reasonable accommodations to students with documented disabilities. As your instructor, I am willing and eager to support you in this regard. Please note that students are responsible for registering with Disabilities Services, and should make requests known to me in a timely manner. If you require accommodations in this class, please speak with me during the first two weeks of the semester, so that appropriate arrangements can be made. The procedures for registering with Disability Services can be found at [http://www.wesleyan.edu/deans/disability-students.html](http://www.wesleyan.edu/deans/disability-students.html).