

## Math 260 Fall 2013

### Sets and Logic

**Meeting times:** Monday - Friday, 10:00-10:50 in Lind 104

**Instructor:** Dr. Dominic Klyve

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**Office Hours:** Monday, Wednesday, Friday 9:00-10:00; Tuesday 11:00–12:00; Thursday 12:00-1:00. I'm also around other times quite a bit, so stop by! If you'd like, you can also make an appointment, and we'll find a time that works for both of us.

This class serves as an introduction to mathematical proof – the backbone of modern mathematics. As such, it may be quite different than other classes you have taken. Instead of “solving problems”, as we did in calculus classes, we shall work to understand “why” things are true, and we shall learn to express that understanding in appropriate mathematical language.

#### Required Text:

*Logic, Sets, and Proof: An Introduction*, by James Harper (an e-Book).

**What will happen in the course:** For the most part, classes will combine lecture with a lot of discussion of the material in the readings. Sometimes we'll stop to let you work on problems yourself, or in small groups.

**Evaluation and Grading:** Grades will consist of four components: quizzes (40%), two midterm exams (15% each), and a final exam (25%) and homework (5%).

In principle, we will cover the whole book. We may skip a few sections, and we might not finish the whole book, but we will cover as much as possible in the time allotted.

An important element in familiarizing you with proofs is writing. You will do a lot of writing in this class. Unlike calculus, there will rarely be long calculations with lots of algebra. Rather, you will have to *describe* (in complete sentences) your thought process, and justify the steps you take.

It is very important that you read the appropriate sections from the book before lecture. A good way to read a mathematics text is to have a separate notebook that you use when reading the book. When you've finished a paragraph in the book, try and write (in the separate notebook) a short (a few sentences) summary of what that paragraph says. In addition, put any questions about the reading in this notebook, and then ask about those questions during class.

Grades will be assigned according to the following scale:

	A	93-100%	A-	90-92.99%	
B+	87-89.99%	B	83-86.99%	B-	80-82.99%
C+	77-79.99%	C	73-76.99%	C-	70-72.99%
D+	67-69.99%	D	63-66.99%	D-	60-62.99%
	F	59.99% and below			

#### Quizzes

We will have a quiz every week, except for those weeks when we have an exam. Many quizzes will be take-home quizzes, and these **will be due in class two days after being handed out**. At times, we may do in-class quizzes instead. I encourage you to work with other students, but you should write up your solutions in your own words.

## **Homework**

Almost every day in class, you will receive a few homework problems. **Problems assigned on a Wednesday or later will be due on the Friday of the following week.** I will mostly grade on completion. This means I'll be most interested in the work you've done - if you just write down an answer, you won't receive any points. It is a good idea to work with other students from class.

## **Late and Make-up Policy for Homework and Quizzes**

I will accept late homework or quiz (but not both!) for full credit twice. However, you must turn this homework or quiz in within two class days of the due date. After that, I will not accept any late work for credit.

## **Exams**

There will be three exams: two mid-terms and a final. The first mid-term will be in about the fourth week of class, and the second mid-term will be in roughly the ninth week. The Final Exam will be on Monday, December 9, at 8:00 a.m. (Sorry about this.) The Final Exam will be cumulative, and **CANNOT** be taken early! **DO NOT** plan on taking your final early.

## **Expectation for Written Work and Office Hours**

Your homework and exams should be written up neatly and legibly, using complete sentences, as appropriate. I also encourage you to come to my office hours to ask questions - but please bring your notes from class!

**Students with disabilities** who wish to set up academic adjustments in this class should confirm with me that I have received a copy of their "Confirmation of Eligibility for Academic Adjustments" from the Center for Disability Services as soon as possible so we can discuss how the approved adjustments will be implemented in class. Students without this form should contact the Center for Disability Services, Bouillon 205 or [dssreceipt@cwu.edu](mailto:dssreceipt@cwu.edu) or 963-2171.

I reserve the right to change the policies contained in this syllabus as dictated by developments during the quarter.