Instructor: Dr. Jim Bisgard   **Office:** Bouillon 118
Phone: 963-2823   **E-mail:** bisgardj@cwu.edu
Webpage: http://www.cwu.edu/~bisgardj   **Office Hours:** MW 1:00 - 1:50, TTh 2:00 - 2:50
                                                  and by appointment.

Course Goals: Math 260 is an introduction to sets and logic. The goal of the class is introduce basic set notation, set theory (often referred to as "naive set theory"), logic, quantifiers and some methods of proof. In addition, there is another, less well-defined goal: to increase your "*mathematical maturity*" in preparation for later proof based classes.

In terms of the book, we will cover Chapters 1, 2 and 3. After these sections, we will jump ahead to Chapter 6 and cover induction. Then, as time permits, we may cover Chapter 4 and 5.

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.

Required Text: Velleman, Daniel J.; How to Prove It: A Structured Approach 2nd ed.; Cambridge University Press

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. *If I suspect that people are not reading the book ahead of time, I reserve the right to administer a short pop quiz on the reading!* (These points will be added to your homework grade.)

1 Grades/Exams/Homework

Grades

Grades will be calculated using the following weighting system:
Homework: 10%;
Take Home Quizzes: 40%;
Exams: 50% total, broken up as follows: 15% for each mid-term and 20% for the final.

	$87-89.9:B+$	$77-79.9:C+$	$67-69.9:D+$	below 60 : F
$93-100:A$	$83-86.9:B$	$73-76.9:C$	$63-66.9:D$	
$90-92.9:A-$	$80-82.9:B-$	$70-72.9:C-$	$60-62.9:D-$	

Quizzes

We will have a take-home quiz every week, except for those weeks when we have an exam. Each quiz will be due at 3:00 p.m. two days after being handed out. (So, a quiz handed out on Tuesday will be due at 3:00 p.m. on Thursday.) 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 by 3 p.m. (For example, the problems from January 7, 8, 9, 12 or 13 will all be due on Friday, January 16.)

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. We won't have time to do many homework problems in class, so please feel free to ask during office hours. However, don't put off asking about homework until the day before it's due! (It makes me very impatient when you come by every twenty minutes to ask about material we covered a week ago!)

Late and Make-up Policy for Homework and Quizzes

I will accept a late homework or quiz (but not both!) for full credit only once. However, you must turn this homework or quiz in within two class days of the due date. I will accept a second late homework or quiz (but not both!) for half credit only once. Again, this homework or quiz must be turned in within two class days of the due date. After that, I will not accept any late work. You may be excused from a quiz or homework if you have proof of a compelling reason. As an example: if you are sick, I will need a doctor's note. In addition, you must notify me before (if possible) or within two days after the due date to be excused from a quiz or homework. I will not excuse you from a quiz or homework for circumstances you know about ahead of time!

Exams

There will be three exams: two mid-terms and a final. The first mid-term will be on January 28, the second mid-term will be February 18, and the Final Exam will be on Wednesday, March 18. The Final Exam will be cumulative, and **CANNOT** be taken early! **DO NOT** plan on taking your final early. If you miss an exam, you can take a make-up, but only if you have proof of a compelling reason for having missed the exam. To get an make-up, you must have proof, and you must notify me before (if possible) or within one class day after the exam to get a make-up. I will not give make-ups for circumstances you know about ahead of time!

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!

2 Important Dates

January 12 - Last Day for Add/Drop
January 28 - first mid-term exam
February 18 - second mid-term exam
February 20 - uncontested withdrawal deadline
March 18 - final exam

3 Legalese/Fine Print

Students with disabilities who wish to set up academic adjustments in this class should give me a copy of their "Confirmation of Eligibility for Academic Adjustments" from the Disability Support Services Office as soon as possible so we can discuss how the approved adjustments will be implemented in this class. Students without this form should contact the Disability Support Services Office, Bouillon 205 or dssrecept@cwu.edu or 963-2171.