

Winter 2015
Math 260 Sets and Logic
Bouillon 101, 10:00 - 10:50 M-F

Instructor: Dr. Jim Bisgard

Office: Bouillon 118

Phone: 963-2823

E-mail: bisgardj@cwu.edu

Webpage: <http://www.cwu.edu/~bisgardj>

Office Hours: M-F 11:00-11:50

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, as well as introducing the abstract definition of functions, relations and equivalence classes. In addition, there is another, less well-defined goal: to increase your “*mathematical maturity*” in preparation for later proof based classes.

Required Text: Harper, James D.; Logic, Sets and Proof: An Introduction CWU coursepack (available from the Wildcat Shop)

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.

1 Grades/Quizzes/Homework/Exams

Grades

Grades will be calculated using the following weighting system:

Homework: 5%;

Take Home Quizzes: 40%;

Exams: 55% total, broken up as follows: 15% for each mid-term and 25% 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 noon two days after being handed out. (So, a quiz handed out on Tuesday will be due at noon on the following 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 at noon.** (For example, the problems assigned between January 7 and 13 will all be due at noon 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 Policy for Homework and Quizzes

Quizzes and homework will be due at noon on their due date. Quizzes or homework handed in after noon on their due date will lose 4 points immediately, and 4 more points for every 24 hours after. That means: if you hand in a quiz at 12:30 pm on the due date, you can earn at most 16 out of 20 on that quiz. If you hand in your quiz one day after the due date at 12:30 pm, you can earn at most 12 out of 20, since over 24 hours will have passed.

Exams

There will be three exams: two mid-terms and a final. The first mid-term will be on Thursday, January 29; the second mid-term will be Thursday, February 19; and the Final Exam will be on Thursday, March 19. 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 a 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. Failure to offer sufficient explanation will not earn full credit. I encourage you to come to my office hours to ask questions - but you must bring your notes from class!

2 Important Dates

January 12 - Last Day for Add/Drop

January 29 - first mid-term exam

February 19 - second mid-term exam

February 20 - uncontested withdrawal deadline

March 19 - 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 dssreceipt@cwu.edu or 963-2171.