scott m. lewis
hertz 225
phone: 963-1803
fax: 963-3226
hours:
m,w,f-9:00am
else, by appointment,
gleefully accepted

 links:

🌐georg cantor

🌐euclid's elements
(from clark university,
worcester, massachusetts)

🌐general history of
mathematics (from trinity
college, dublin)

🌐aristotlean logic

🌐chronology of
mathemmaticians (also
from clark)

of course, there are many

sets and logic
math 260
5 credits
bu 102
mtwhf - 1:00 pm

prerequisites: math 173 (calculus ii) **or** CS 301 (data
structures) and MATH 172 (calculus i) or equivalent.

text:
(1991). morash, ronald. bridge to advanced mathematics,
second edition. (reprint. courtesy of mcgraw-hill, inc.)

description:
since the work of david hilbert, in the early 20th century,
the axiomatic method has been the very cornerstone of
mathematics. this method has through the centuries came
in and out of favor, but its roots go back to euclid's
elements and beyond. now, **any** mathematics must be
shown to 'fit' logically into the structure of the discipline.

this is a course about axiomatic systems and the
axiomatic method. sets are the building blocks, out of
which axiomatics systems are made, logic is the glue that
holds them together. proof is the process by which
statements about mathematical things are shown to 'fit.'

math 260, sets and logic, represents a transition to
advanced mathematics -- all roads to higher
mathmematics pass through this field.

there are some links in the left sidebar of this page. take
the time to explore what some people in other
universities are interested in. there are other possibly
useful links back at my home page.

this quarter we will cover the following in morash:

- ch. 1 (sets): sec. 1.1-1.4
- ch. 2 (introduction to logic): sec. 2.1-2.3
- ch. 3 (introduction to proof): sec. 3.1-3.5
- ch. 4 (methods of proof i): sec. 4.1-4.4
- ch. 5 (methods of proof ii): sec. 5.1-5.2
- ch. 6 (equivalence relations): sec 6.1-6.3
- ch. 7 (functions): 7.1-7.3

other resources out there. find some of them and report back to me.

check out the class calendar.

evaluation:
the bulk of your grade (95%) will be determined by two midterms (30% ea.) and a final examination (35%). the first midterm will take place (and be graded) before the deadline for dropping the class.

the remaining 5% of your grade will be based on the homework assignments i collect, the several, unannounced but straight-forward quizzes we have, and things like class participation.

if you have any questions or comments, feel free to come by my office or e-mail me at the address below.

student learner outcomes
the most important things you learn in school are not going to be measurable, sorry. in fact, the absolute best service a list of 'student learner outcomes' could possibly provide is as a random sample of behavioral objectives. that said, at the end of this course, you will have a reasonable facility (as measured by the evaluation procedures described above) in manipulating sets, creating truth tables, identifying logical forms, and constructing sound mathematical proofs with a variety of techniques. By the way, when we use the phrase 'elementary set theory' to describe this course, the word 'elementary' should not be confused with 'simple.'

note
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 so that we can meet in order to discuss how the approved adjustments will be implemented in this class. students with disabilities without this form should contact the disability support services office, bouillon 205 or dssrecept@cwu.edu or 963-2171 as soon as possible.

no, no, no!
no late assignments, no early tests, no late tests, no make-up tests (including finals ... be there).

| post no bills |

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fall 2007.

Scott M. Lewis, slewis@fulbrightweb.org
There's no place like home.