Course Syllabus for MATH 131 (Spring 2009)
Discrete Mathematics

Instructor Information

Name: Dr. Rebecca S. Wills
E-mail Address: wills@roanoke.edu
Office: Trexler, 270-G
Phone Number: (540) 375-2449
Webpage: www.roanoke.edu/staff/wills
Office Hours: Mon. (3:40 - 5:10), Tues. (1:20 - 3:20),
Wed. (3:40 - 4:10), Thurs. (1:20 - 3:20), and by appointment

Class Information

Meeting Time and Location: Block 5 (1:10 - 2:10 p.m.), Life 301
Final Exam: Monday, April 27 (2:00 - 5:00 p.m.)
Blackboard: Check it daily for announcements and postings.
Pre-requisite: MATH 121 (Calculus I)
Catalog Description: Set theory, number systems, formal logic,
functions and relations, and an introduction to mathematical
proofs
Textbook: Discrete Mathematics with Applications (3rd ed.), by
Susanna S. Epp
Course Objectives: Two primary goals of this course are to help
you develop the ability to think abstractly and to prepare you
for upper level courses in mathematics, especially courses
that rely on understanding and writing mathematics. The
course includes an introduction to the format of definition,
theorem and proof, the design and writing of logical
arguments and formal proofs, and techniques of problem
solving in higher level mathematics.
Course Content: We will attempt to cover the following sections
from the textbook: 1.1 - 1.3, 2.1 - 2.4, 3.1 - 3.4, 3.6 - 3.7, 4.1 -
4.3, 5.1 - 5.3, 7.1 - 7.5, 10.1 - 10.3.
Tentative Course Schedule: See the back of this page.

Attendance Policy:
Visit http://www.roanoke.edu/catalog2007/attendance.htm
for Roanoke College’s attendance policy. I will take
attendance at the beginning of each class period. Leaving
before the class period is over (without excuse or dismissal)
could be considered an absence for the class period. Notify
me as soon as possible if you will not be attending class.
Academic Integrity Statement: All students are expected to read
and abide by all policies outlined in the Academic Integrity at
Roanoke College brochure for 2007-2009. See
http://www.roanoke.edu/catalog2007/integrity.htm and
http://web.roanoke.edu/x2560.xml for additional
information.
Software/Technology:
• You will not need a calculator for this class.
• If you plan to use your laptop during class, you must submit
to your instructor a signed copy of the Laptop Agreement
Form, which is available for download from Blackboard.
• Cell phones must be turned off before class begins. In the
event that your cell phone rings during class because you
forgot to turn it off, please silence it as quickly as possible. It
is not acceptable to use your cell phone for any purpose
during class. Note that any purpose includes text messaging!
• Additional items not permitted for use in class include (but
are not limited to): PalmPilots, Pocket PCs, Blackberrys, and
headphones.
Information for Students with Disabilities: Reasonable
accommodations will be made. For additional information,

Daily Reading: To prepare for class discussion of course material,
you are expected to read sections from the textbook before
the period when corresponding material has been scheduled
to be covered.

Determination of Final Grades

MCSP Conversation Series (2%)
• The MCSP department offers a series of discussions that
  appeal to a broad range of interests related to these fields of
  study. These co-curricular sessions will engage the
  community to think about ongoing research, novel
  applications and other issues that face these disciplines.
• As a member of this class, you are required to attend one
  meeting and submit to your instructor a correctly completed
  Conversation Series Form (available to download from
  Blackboard). For full credit, you must submit the form no
  later than the beginning of the 3rd class period after the date
  of the talk. Note that a detailed summary of the talk will be
  required for a perfect score.
• For a listing of dates, times, speakers, and topics, visit
  http://cs.roanoke.edu/MCSPSeries/ (updated often).

Definitions and Theorems Quizzes (6% - 3 quizzes worth 2% each)
• Listings of definitions/theorems will be available for you to
download from Blackboard.
• For the first 15 to 20 minutes of each test review day, you
will have a quiz on definitions and theorems.

Group Projects (9% - 3 projects worth 3% each)
• Groups will be assigned during the second week of classes.

Homework (15% - 6 assignments worth 2.5% each)
• Due dates are posted on the class schedule page.
• You are encouraged to discuss problems with others;
however, the work you submit must be written or typed by
you and must be a reflection of your understanding of the
material.
• A portion of each homework grade will be based on
  formatting. Follow the “Suggested Homework Format” at
  http://www.math.hmc.edu/homework/.
• In general, late submissions will be reviewed but will not
  receive a grade.
• In addition to graded homework, you are encouraged to
  attempt other exercises from the textbook.

Tests (45% - 3 tests worth 15% each)
• Dates: Test 1 (Wed., February 11), Test 2 (Wed., March 18),
  Test 3 (Wed., April 15)
• Unless weather conditions dictate otherwise, the above test
dates will not change. If you miss or will be missing a test for
reasons beyond your control (college sports team event,
sickness, family tragedy, etc.), notify your instructor as soon
as possible. An appropriate letter of documentation will be
required to make up a test.
• If you have no more than 3 absences (for any reason) at the
end of the semester, your lowest test grade will count half
the weight of the other 2 tests (lowest: 9%, other two: 18%).

Cumulative Final Exam (23%)

Letter Grade

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<th>Grade</th>
<th>A</th>
<th>B+</th>
<th>B</th>
<th>C+</th>
<th>C</th>
<th>D+</th>
<th>D</th>
<th>F</th>
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<td>A</td>
<td>90-92.99 A-</td>
<td>87-89.99 B+</td>
<td>83-86.99 B</td>
<td>80-82.99 B-</td>
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<td>60-62.99</td>
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Note: Do not assume that grades will be rounded at the end of the
semester.