Class Time: MWF 12:10-1:00 p.m.  
Class Location: MA 211  
Course Lecturer: Dr. Mary J. Riegel  
E-Mail: riegelmj@mso.umt.edu  
Office Hours: TR 9:10 -11:00 a.m.  
Office: Math 012

Catalog Description  Mathematical concepts used in computer science with an emphasis on mathematical reasoning and proof techniques. Elementary logic, sets, functions, and relations, combinatorics, mathematical induction, recursion and algorithms. Mathematics majors should take M 307 instead of M 225 (MATH 305 instead of MATH 225).

Prerequisites  M 162 (MATH 150) or M 171 (MATH 152).

Learning Goals  
1. To gain an in-depth look at several central themes of discrete mathematics;  
2. To learn to reason mathematically and communicate ideas in a clear and concise manner;  
3. To use induction and other techniques of mathematical proofs.

Format  Lectures MWF 12:10-1:00pm (M 225, Section 01, CRN: 70409) in MA 211.


Schedule  We will cover sections from chapters 1-6, 8-9 from the textbook.

Add/Drop Policy  The last day to add/drop or change grading option to Audit by Cyberbear is 9/17 The last day to change sections and to change grading options is 10/29. This is also the last day to drop. Changes after this deadline and until 12/7 must be done by Petition to Drop/Add after deadline and approved by me, your advisor and the appropriate Dean. Approval requires genuine extenuating circumstances as listed in the university catalog.

- Missing a substantial number of class days due to illness, accident or family emergency.  
- A change in work schedule that makes it impossible to attend class or devote adequate time to the course.  
- Registration in the course by error and never attending class.

Reasons that are not satisfactory include forgetting to turn in a drop slip and protecting your grade point average.

DSS  Students with disabilities are welcome to discuss accommodations with me. Disability Services for Students will assist in the accommodation process. For more information, visit their website at http://life.umt.edu/dss. Please note that appropriate forms need to be submitted in a timely fashion.

Academic Honesty  All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

Student Conduct Code  All students need to be familiar with the Student Conduct Code, which is available for review online (the easiest way to find it is to search for “Student Conduct Code” via the “A to Z Index” link on top of the UM home page.)
Important Dates
Aug 27 (Mon): Classes Begin  Nov 21 (Wed): Travel Day (No classes held)
Sept 3 (Mon): Labor Day Holiday  Nov 22-23 (Thu-Fri): Thanksgiving Vacation
Sept 17 (Mon): Last day to add/drop on Cyberbear  Dec 7 (Fri): Last Regular Class Day
Oct 29 (Mon): Last day to add/drop by paper form  Dec 7 (Fri): Last day to Add/Drop by Petition
Nov 12 (Mon): Veterans Day Holiday  Dec 10-14 (Mon-Fri): Finals Week

Grading
Homework. Homework assignments will be given regularly.

Quizzes. Regular quizzes will be given to help you keep on top of the material.
The two lowest quiz scores will be dropped; there will be no make-ups for missed quizzes,
regardless of the reason (e.g. sickness, sports, family emergency, etc): a missed quiz may be
among those dropped.

Class Participation. Scoring requires attendance; there will be no make-ups for this.

Exams. There will be three exams, tentatively scheduled as follows: Exam 1 on Wednesday
September 26, Exam 2 on Wednesday October 31, and Exam 3 on Monday November 26.
There will be make-ups for missed tests only if scheduled before the test, or under serious
extenuating circumstances.

Final Exam. There will be a cumulative Final Exam on Thursday December 13,
8:00-10:00am. Early finals will not be given.

Grade. Your course grade will be based on 3 Tests (100 points each), the Final Exam (150
points), Homework (100 points), and Quizzes and Class Participation (150 points).
When graded work (such as a test or a quiz) is returned, there is one week from the date of
the return for contesting the grading. After that period the grade will be accepted as final.
Letter grades will correspond to the following percentages:

Grades: Final grades will be assigned as follows: A ≥ 92%, A- ≥ 90%, B+ ≥ 87%, B ≥ 83%,
B- ≥ 80%, C+ ≥ 75 %, C ≥ 70%, C- ≥ 65%, D+ ≥ 62, D ≥ 58, D- ≥ 55.

If you are taking this course as a general education requirement, you must take it for a
traditional letter grade (not CR/NCR). A grade of “D-” is considered passing and will earn
you credit for this course, BUT it will NOT fulfill your general education requirement and
you will have to re-take the class. A grade of C or better is needed to fulfill the math literacy
requirement.

Incomplete Grades. To be eligible for an incomplete (grade “I”) a student must have been in
attendance and passing the course up to 3 weeks before the semester ends, and be unable to
complete the course due to extenuating circumstances, which usually means serious illness
or death in the family. Incompletes are not given under any other circumstances and are
always given at the discretion of the course coordinator. See the 2011-2012 catalog for further
information.