Cedar Crest College

COLLEGE MATHEMATICS- MATH 102
3 Credits
Spring 2009

Instructor: Melissa Ulicny   maulicny@cedarcrest.edu
          Ext. 6467   610-504-5979, cell(between 9-7 pm)

Instructor Assistance: I would gladly help to clarify any areas of uncertainty during the semester. Please drop in at my office hours listed below in the adjunct office located at Curtis Hall Room 204.

      Tuesday: 1:30-2:20 and 6-6:50pm
      Thursday: 1:30-2:20 pm
      OR BY APPOINTMENT.

Text: Mathematics in Our World, Allan G Bluman

Calculator: A scientific calculator is required. The use of cell phones as a calculator is NOT permitted!

Course Description: A non-technical presentation of mathematical topics essential to the student of the arts, humanities or social sciences. The following are studied: elementary sets theory, logic, number systems, probability and statistics and measurement and applications of mathematics to various disciplines. A scientific calculator is required. This course is appropriate for secondary education students (not math majors); some content is based on the Pre-Professional Skills Test in Mathematics (PRAXIS).

Course Objectives: Upon completion of the course the student will be able to demonstrate proficiency in:
- The basics of set theory including Venn Diagrams and basic set operations
- The basics of logic including symbolic logic, computation of truth tables, and analysis of arguments.
- The understanding of the rules of Algebra as they apply to the real number system.
- The understanding of systems of linear equations and inequalities.
- The basics of probability.

Attendance: Attendance will be taken at all classes. If you will be absent from class, I ask that you please write me an email or leave me a message as to your absence. It is your responsibility to get all missed information from a classmate. **If you are absent from a test, quiz or assignment due date, a valid doctor's excuse is necessary to retake the test. If no valid excuse is produced, you will receive a grade of zero for that test.**

Instructional Method: Class time will be used for instructor demonstration and student practice. Homework assignments will be given for student practice. Practice is essential to success in this course. Homework assignments will be collected and graded only when indicated. Answers to homework problems can be found in the back of the textbook and/or solutions manual. You should check your work prior to entering the following class meeting or attending office hours in order to have questions prepared regarding the content.

Grading Procedures: Your grade will be determined by three exams, a quiz, graded assignments, and a project. Graded assignments are to be completed individually. **All assignments are due in class on the due date and will not be accepted otherwise without prior notification and documentation of a legitimate excuse.** Collaboration on these assignments is not allowed and will be violating the Honor Philosophy in the Cedar Crest College Student Guide. All student work will be returned within approximately one week of its due date.

Grades will be calculated on a total point system. At the end of the semester these will be converted to a percent.

A	93-100	A-	90-92	B+	87-89
B	83-86	B-	80-82	C+	77-79
C	73-76	C-	72-70	D+	67-69
D	60-66	F	0-59		

Class Cancellations: College wide class cancellations are announced on the regular media and on the college inclement weather hotline. In a rare event that I need to cancel an individual class, every effort will be made to notify students via email of the class cancellation. When a class is cancelled, the following will occur:
- If a class is cancelled on the day of a test, the test will be given at the next class.
- If a class is cancelled on the day an assignment is due, the assignment will be collected at the next class.

Students with Disabilities: Students with documented disabilities who may be in need of academic accommodations should discuss these needs with me during the first week of class.

This syllabus is subject to change. Notice will be given to any changes during the semester.

Date	Section/Topic	Assignment
T 1-20	2-1 The Nature of Sets	2-1 Pg 41 #1-67 odd
R 1-22	2-2 Subsets & Set Operations	2-2 Pg 50 #1-49 odd
T 1-27	2-3 Venn Diagrams 2-4 Using Sets to Solve Problems	2-3 pg 58 #1-19 odd 2-4 pg 63 #1,5,7 Select Chapter 2 Review problems
R 1-29	2-5 Infinite Sets 3-1 Statements	2-5 pg 68 #1-9 odd 3-1 pg 80 #27-63 odd
T 2-3	3-2 Truth Tables 3-3 Types of Statements	3-2 pg 91 #3,5,9 3-3 pg 98 #1,5,9,11,15,23
R 2-5	*Ch 3 Quiz (5 min)* 3-4 Arguments Chapter 2 and 3 Review	3-4 pg 104 #3,7,15,17 *Graded Assignment*
T 2-10	*Graded Assignment Due* *Exam 1- Chapters 2 and 3*	
R 2-12	5-1 The Natural Numbers 5-2 Integers	5-1 pg 168 #5-15 odd, 21, 35-41odd, 53,63 5-2 pg 179 odds ending w/ 1 or 5
T 2-17	5-3 The Rational Numbers 5-4 The Irrational Numbers	5-3 pg 192 #21-35 odd, 41,47, 53,55 5-4 pg 201 #7-39 odd
R 2-19	Finish 5-4 5-5 Real Numbers	
T 2-24	*Quiz- Chapter Ch 5 Sects 1-4* 5-6 Exponents	5-6 Pg
R 2-26	5-7 Sequences	5-7 pg
T 3-3	Chapter 5 Review	
R 3-5	7-1 Fundamental Concepts of Algebra 7-2 Solving Linear Equations	7-1 pg 275 #5,13,19,23,29,35, 37,41,53,55 7-2 pg 287 #1-43 odd
T/R 3-10+12	No Class- Spring Break ☺	
T 3-17	Finish 7-2 Solving Linear Equations 7-3 Applications of Linear Equations	7-2 pg 287 #1-43 odd 7-3 pg 293 #1-37 odd

R 3-19	7-4 Solving Linear Inequalities 7-5 Ratio, Proportion, and Variation	7-4 pg 300 #11-37 odd 7-5 pg 311 #11-19 odd, 23,25,29,33
T 3-24	7-6 Solving Quadratic Equations	7-6 pg 324 #1,7,13,19,25,31,35,39
R 3-26	Chapter 5, 7 Review	***Graded Assignment***
T 3-31	***Exam 2 – Chapters 5,7*** ***Graded Assignment Due***	
R 4-2	8-1 The Coordinate System and the Line	8-1 pg
T 4-7	8-2 Systems of Linear Equations	8-2 pg
R 4-9	8-3 Systems of Linear Inequalities	8-3 pg
T 4-14	8-5 Functions	8-5 pg
R 4-16	***Quiz Ch 8***	
T 4-21	11-1 Basic Concepts of Probability 11-2 Tree Diagram, Tables, Sample Spaces	11-1 pg 532 #1,3,5,15 11-2 pg 541 #1,5,9,11
R 4-23	11-4 The Addition Rules for Probability	11-4 pg 556 #3,9,13
T 4-28	11-5 The Multiplication Rules & Conditional Probability	11-5 pg 567 #5,11,15,19,25
R 4-30	Chapter 8, 11 Review	***Graded Assignment***
TBA	***Exam 3 – Chapters 8, 11*** ***Graded Assignment Due***	