MATH 242 Precalculus Algebra MWF 12:30-1:50 MWF 2:00-3:20
Fall Semester 2009 Room 2002 Room 2002

INSTRUCTOR INFORMATION

Mark Turner

Office:	2326		Email:	mturner@cuesta.edu
Office Hours:	MW	3:30-4:00	Office Phone:	546-3100, Ext.2789
	TTh	9:30-10:20 and	Math Div. Fax:	546-3232
		11:30-12:20	Web: http://academic.cuesta.edu/mturner/	

COURSE INFORMATION

ABOUT THE COURSE

This is essentially a course in advanced algebra; its primary purpose is to prepare you for a rigorous calculus course or advanced courses in business math. ***Students who are taking this course to satisfy general education or transfer requirements, and are NOT planning on taking a calculus course, should seriously consider Math 30 (College Mathematics for the Humanities), Math 36 (Introduction to Statistics), or Math 32 (College Algebra) instead of this course.*** *Both Math 30 and Math 36 emphasize "real world" math, which most students find more interesting and relevant than the material in Math 42. Math 32 is a leaner, lighter version of this course, designed for students who must have advanced algebra but who are not preparing for calculus. Math 42 is designed solely for students who need to hone their algebra skills for calculus and advanced business mathematics. The course is fast-paced and demands a large time commitment. Ask your counselor to find out what options are available for your major.*

STUDENT LEARNING OUTCOMES

By the end of this course, the student will be able to:

1. *Analyze, graph, and interpret the graphs of the following:*
   - *inverse functions*
   - *polynomial functions*
   - *rational functions*
   - *exponential functions*
   - *logarithmic functions*
   - *conic sections*
   - *parametric equations*
2. *Solve the following:*
   - *polynomial equations and inequalities*
   - *rational equations and inequalities*
   - *exponential equations*
   - *logarithmic equations*
3. *Solve systems of:*
   - *equations algebraically and graphically*
   - *inequalities graphically*
4. *Use matrix methods to:*
   - *add and subtract matrices*
   - *multiply matrices*
   - *compute determinants*
   - *solve systems of linear equations*
5. *Identify, construct, and use proper notation for the following sequences and series:*
   - *recursive*
   - *arithmetic*
   - *geometric*
6. *Correctly apply a mathematical problem to solve a problem given in words*

PREREQUISITES

Completion of Math 127 (Intermediate Algebra) or equivalent with a grade of C or better, preferably within the last year.

ADD POLICY

Adds will be taken as space permits. The last day to add is August 29. You may add online through myCuesta using an ADD code or in the Records office with a signed add slip. No adds will be accepted after the first week unless the student has been attending class on a regular basis. Priority will be given to students who have been attending daily.

COURSE MATERIALS

Required: *The text for this course is Precalculus; Seventh Edition, by Larson/Hostetler. You will also need a graphing calculator for this course. I recommend the TI-84 Plus Graphing Calculator, as this is the model I will be using in class. Calculators with computer algebra systems (CAS) or on cell phones will NOT be permitted in class.*

NOTE: Due to the budget crises, students will need to print out their own copies of all classroom handouts. All materials are available on the Handouts page of my web site.

Optional: *The Precalculus Algebra TI-83/TI-84 Tutorial is available on CD-ROM in the bookstore for additional calculator instruction, or you can purchase an online subscription at www.TItutorials.com. The Study and Solutions Guide is also available in the bookstore as an optional resource.*

ATTENDANCE

To do well you must attend class. It is up to you to drop the course (the last day to withdraw is November 7). However, I may drop any student who has been absent for two consecutive class sessions or a cumulative total of eight class hours unless prior arrangements have been made in advance. ***If you must be absent from class, it is YOUR responsibility to check the class schedule on my website for any assignments, and to contact a fellow student for any important announcements that you may have missed!***

HOMEWORK

Textbook assignments will be given daily, and each assignment is due at the beginning of the next class session. Homework should be completed neatly and in an organized manner, with section and problem numbers clearly indicated. Present your solutions to problems in the order they are assigned. Copy each problem (except word problems) and write the steps of your solution in a vertical column instead of across the page. I recommend the green engineering paper because it makes graphing easier and helps organize your work. Please use pencil instead of pen. Make use of office hours or the Math Lab on a regular basis to get help with problems that are giving you difficulty.

Assignments will be randomly collected without prior notice. Assignments are all worth 10 points; 7 points if it is at least 75% complete, and one additional point for each correct even problem. Work MUST be shown! Homework that is sloppy, disorganized, or hard to read will not be given any credit. Your lowest homework score will be dropped at the end of the semester.

GROUP ASSIGNMENTS

Special problems or projects will be given as group assignments during the semester. Each group will submit one report for each project or assignment. The report should be "publish ready", meaning complete, neatly written or typed, clear, organized, supported by appropriate illustrations or diagrams, and mathematically and grammatically correct. Group problems involve brief explorations or challenging applications related to topics we cover. Group projects involve a more prolonged and in-depth study of topics that are extensions of concepts we discuss in class. Your group will need to spend some time outside of class to complete these assignments.

ENRICHMENT ASSIGNMENTS

Enrichment assignments are optional and may be used to earn extra credit toward your group assignments percentage. You can find these assignments on my web site. They involve exploring additional topics that we will not have time for in class. Please write your work neatly on separate paper. There is a limit of 3 enrichment assignments per student.

EXAMS

There will be five midterm exams and a comprehensive final exam. There are NO make-up exams; missing an exam will result in a score of zero. The final exam will be given on

Monday, December 14 at 2:15-4:15 (2:00 class)
Wednesday, December 16 at 12:00-2:00 (12:30 class)

with NO exceptions. Make sure to schedule any travel plans after this date. You will need a photo ID with you during the final exam, so please be sure to have one available by then. At the end of the semester I will replace your lowest midterm exam score with your percentage on the final exam (only if it is to your benefit).

WARM-UP PROBLEMS

Most class days will begin promptly with a short warm-up problem that pertains to previous material or helps prepare you for the day's lesson. Students may work together in pairs. Warm up problems are scored 1 point if correct, 0 points if incorrect. Two warm-up problems will be randomly selected for extra credit on the following exam. These points cannot be made up if you are late or absent to class.

GRADING

Your grade will be based upon the following point distribution:

Group Assignments 20%	*85%+*		*A*
Homework 5%	*75%–*	*85%*	*B*
5 Midterm Exams 60%	*65%–*	*75%*	*C*
Final Exam 15%	*55%–*	*65%*	*D*
Total possible 100%			

If you do not take the final exam, you will receive a failing grade.

MYCUESTA

The primary means of communicating with students outside of class will be through myCuesta. This includes announcements such as a class cancellation, change of room, etc. ***It is essential that you log in to myCuesta on a daily basis (evening or early morning is best) to check for any important announcements or news.*** *If you do not have access to the internet at home, there are computers open for student use on campus.*

There are also a number of excellent communication resources available through myCuesta, including a chat room and message board. I encourage you to take advantage of these to ask questions if you are confused about something, need help with a homework problem, want to carpool to class, or to work on your group problems and projects.

ADDITIONAL RESOURCES

Math Lab: *The Math Lab in 2601 is available most days and some evenings. Look for a posted brochure with the current hours.*

Tutoring: *The Tutorial Center provides free individual and small group tutoring in many academic subjects starting the third week of classes. Students receive one hour per week per subject. Tutoring appointments are scheduled by contacting the Tutorial Center in the Academic Support Center, Room 3300.*

Library: *The Library should have at least one copy of the text available on reserve. They also have Instructional DVDs that you can check out overnight.*

Internet: *My web site (http://academic.cuesta.edu/mturner/) has a number of resources that you may find helpful, including a daily schedule that lists the material covered, homework assigned, and handouts given in class each day. You can also download worksheets, study guides, previous exams, answer keys, class lectures, and other study materials directly from the web site.*

DISABLED STUDENTS

Any student who feels he or she may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact Disabled Student Services & Programs at Building 3300 on SLO Campus (546-3148) to coordinate reasonable accommodations for students with documented disabilities.

STUDENT CONDUCT

Students are expected to conduct themselves in a manner that is appropriate for a college classroom. These expectations include:

Arriving to class on time, and once in class staying for the entire period.
Listening quietly while the instructor or another student is talking.
Being courteous to the instructor and your fellow students.
Actively participating when given an activity to perform in class.
Cell phones are to be ***turned off*** *before entering the classroom.*

Please read the Student Code of Conduct in the Class Schedule for other expectations regarding student conduct.

ACADEMIC HONESTY

Please review the Academic Honesty policy in the Class Schedule. Students who violate these principles are subject to disciplinary procedures. Any students caught cheating on an exam will, as a minimum, receive a failing score on that exam that cannot be replaced.

DISCLAIMER

Although every effort will be made to adhere to the policies outlined in this syllabus, the instructor reserves the right to revise any information without prior notice.