Math 120R: Calculus Preparation
Summer 2008

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Textbook: "Functions Modeling Change" Second Edition, Connally, Hughes-Hallett, Gleason.
Course Website: http://math.arizona.edu/ jgemmer/Math120RNewStart.html
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Course Objectives

- To prepare students to be successful in the Calculus sequence at UA (Math 124, 129 and 223).
- To help students develop and refine basic algebra skills by way of an integrated review of these skills as they are needed in the course.
- To promote problem-solving and critical thinking skills through the application of algebraic concepts to common situations.
- To enhance learning and understanding of algebraic concepts through the integrated use of graphing calculators.
- To promote and utilize the "Rule of Four": All concepts are explored algebraically, numerically, graphically and in context with applications.
- To incorporate writing into the curriculum. Through writing about mathematics you will increase your understanding of the mathematical concepts.
- To help strengthen students' general academic skills.

Attendence

- Attendance will be taken every day.
- Students must attend and participate in class everyday. If you are absent due to illness or family emergency, then you must call the Multicultural/Academic Student Affairs office at 621-3093 and leave me a message before 9:00am on the day of absence.
- If you are absent more than 2 times, your enrollment in the program is in jeopardy and you risks being administratively dropped from the class and from the program.
- If you are more than 10 minutes late you will be counted for half an absence. If you are more than 30 minutes late you will be counted for a full absence.

Academic Integrity

Students are responsible to inform themselves of University policies regarding the Code of Academic Integrity. Students found to be in violation of the Code are subject to penalties ranging from a loss of credit for work involved to a grade of E in the course, and risk possible suspension or probation. The Code of Academic Integrity will be enforced in all areas of the course, including, but not limited to, tests and quizzes. For more information about the Code of Academic Integrity policies and procedures, including information about your rights and responsibilities as a student, see http://dos.web.arizona.edu/uapolicies/cai1.html.

Classroom Conduct

Students at The University of Arizona are expected to conform to the standards of conduct established in the Student Code of Conduct. Prohibited conduct includes:

- All forms of student academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, and plagiarism.
- Interfering with University or University-sponsored activities, including but not limited to classroom related activities, studying, teaching, research, intellectual or creative endeavor, administration, service or the provision of communication, computing or emergency services.
- Endangering, threatening, or causing physical harm to any member of the University community or to oneself or causing reasonable apprehension of such harm.
- Engaging in harassment or unlawful discriminatory activities on the basis of age, ethnicity, gender, handicapping condition, national origin, race, religion, sexual orientation, or veteran status, or violating University rules governing harassment or discrimination.

Students found to be in violation of the Code are subject to disciplinary action. For more information about the Student Code of Conduct, including a complete list of prohibited conduct, see the following website: http://web.arizona.edu/ dos/uapolicies/scc5308abcd.html.

Students should turn off all electronic devices during class unless the device is deemed necessary for the class by the instructor. This includes, but is not limited to cell phones, mp3 players, pda's and computers.

Calculators

A graphing calculator (TI-82, 83, 84, 85 or 86) is required for this course. Calculators that perform symbolic manipulations (such as the TI-89 or TI-92) cannot be used. For in-class exams, quizzes, and the final exam, the only programs allowed in your calculator are the EVALUATE and QUADRATIC FORMULA programs found on the Math department website under Academics. If you do not have a graphing calculator, you may borrow one from the New Start Program.

In-Class Exams

All electronic devices, particularly cell phones, must be turned off during exams. Silent and vibrating modes are not allowed. There will be five exams. Three of these exams will cover the material

from the text, the fourth test will be an algebra test, and the fifth test will be a comprehensive final exam. All exams are closed-book and closed-notes. Any questions regarding the grading of exams need to be cleared up within one week after the exam has been returned. Please note that exam scores will not be curved and there is no extra credit.

Missed Exams

Students are expected to be present for all exams. If a verifiable emergency arises which prevents you from taking an in-class exam at the regularly scheduled time, you must notify me as possible, and in any case, prior to the next regularly scheduled class. Make-up exams will be administered only at my discretion. If a student is allowed to make up a missed exam, (s)he must take it at a mutually arranged time. No further opportunities will be extended. Failure to contact your instructor as stated above or inability to produce sufficient evidence of a real emergency will result in a grade of zero on the exam.

Students with Disabilities

If you anticipate issues related to the format or requirements of this course, please meet with your instructor to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; http://www.drc.arizona.edu) and notify your instructor of your eligibility for reasonable accommodations. You and your instructor can then plan how to best coordinate your accommodations.

Withdrawal

A student in New Start with a grade of D or E may initiate a withdrawal from class through the end of the program-July 17. Withdrawing does not affect the student's grades or enrollment status for the subsequent Fall semester.

Homework Policy

Homework is an essential part of this course and should be taken seriously. Among other things, homework provides me with feedback and also helps prepare you for the exams. Typically, homework assignments will consist of problems from the textbook. Many of the assigned problems will not only ask you to solve a problem computationally, but will also ask you to explain your methods using clearly written sentences.

Homework Procedures and Format

1. **Deadlines:** Homework will be assigned almost daily regularly and will be due the next lecture period. Homework will be collected at the beginning of the class period it is due. **No late homework will be accepted**. Homework that was completed during class time will also not be accepted. If you come in late, hand in your homework immediately.

2. **Grading:** Each homework assignment will be graded on a 10 point scale. Because of time limitations, I will not grade every problem assigned. Instead, I will select certain problems that will be graded (generally five problems).

3. **Format:** To ensure that I return your homework within one class period please make sure your homework obeys the following format:

   (a) Do your homework on 8.5×11 paper and use both sides of the paper.

   (b) Write your name, textbook section number, and date at the top of the first page.

   (c) Each problem should be clearly numbered and written legibly. If I cannot read or I do not understand what you have written, I will not grade the problem.

   (d) Do not use a pen.

   (e) For each problem, clearly illustrate the steps you followed to solve the problem. For some problems, a "correct" answer with no work will receive no credit.

   (f) If your homework contains multiple pages, staple all of the pages together.

   Failure to follow any of these guidelines could result in a loss of points on the assignment.

Re-Grading of Homework

Many concepts in mathematics take several days of thought before they become clear. Therefore, students may resubmit graded homework for re-grading if the following conditions are met:

1. Every problem on the assignment has been completed.
2. The homework to be re-graded is submitted the class period after the homework was returned.

A re-graded assignment will be able to earn half as many points back as the original assignment. For example, if a student scores an 8/10 on an assignment the highest score obtainable on a re-graded assignment is a 9/10. Any assignment submitted for re-grading must obey the following format:

1. All graded problems the student missed must be completely redone.
2. The redone problems must be stapled on the back of the original assignment.

Writing in Mathematics

In academics, being able express your thoughts in a way that can be understood by others is essential. This is especially true in the scientific fields since mathematicians and scientists must explain abstract concepts to people outside of their fields. By writing in Math 120R, you will be able to present your work in a clear and organized fashion. In addition, writing solutions to problems will provide you with a deeper understanding of the concepts discussed in class. Moreover, writing will enable me to understand the concepts that have remained unclear.

Calculation of Homework Grade

To calculate the student's homework final score I simply rescale the student's total number of homework points to be out of 100 points.

Quizzes

At the begining of almost every class period there will be a brief quiz. Each quiz will generally be worth 20 points and is included in your quiz grade. Typically, each quiz will consist of a

problem similar to one from the homework and also an algebra review problem. To calculate the student's quiz grade at the end of the semester I rescale the student's total number of quiz points to be out of 50 points.

Group Project

The purpose of the project is to synthesize what has been learned in class. Each project will use the mathematics we have learned in class to model real world situations. A major component of your grade on the project will be from how well you explain your equations and the goals of the project.

Grades

In Class Exams:	300
Algebra Exam	100
Group Project	50
Quizzes	50
Homework	100
Final Exam	200
Total Points	800