Math 123 – Finite Mathematics

Time: 11:45 am – 1:15 pm MTWRF Section: 001 Location: Ayres 101
Course website: http://www.math.utk.edu/~dilling/math123/ (Also, http://online.utk.edu)

Instructor: Rick Dilling Email: dilling@math.utk.edu
Office: Ayres 107C Hours: MTWRF, 11:00 am – 11:40 am; MWRF, 1:15 pm – 1:45 pm
Mailbox: Ayres 119 (next to the Dept of Mathematics – Main Office)

Course Description: For students planning to major in business, economics, social science, agriculture, communications, or human ecology (not for students planning to major in the physical sciences, engineering, mathematics, or computer science). Exponential and logarithmic functions, interest and annuities, systems of linear equations and inequalities, matrices, Leontief output analysis, linear programming and optimization including the Simplex method. (QR) 3 credit hours
Prerequisite: satisfactory placement exam score, or 119 or 130. Students who receive a grade of C or better in Math 123 may not subsequently receive credit for 119.

Text: *Finite Mathematics and Applied Calculus, 2nd ed.* by Berresford and Rockett.

Calculator: A graphing calculator is required for this course and should be brought to every class (along with the book). The Math Department recommends and provides support for the TI-83+ and TI-84+ models. Use of cell phone calculators and advanced calculators, such as the TI-89 and TI-92 are not allowed in this course. If you aren't sure if your calculator is allowed, ask the instructor in advance.

Course Grading: There are 1000 points possible in the course broken down as follows:

Points:

Quizzes (best 10):	200
Projects:	200
Exam 1:	200
Exam 2:	200
Exam 3:	200
Total:	1000

Grading Scale:

A	900 – 1000
B+	850 – 899
B	800 – 849
C+	750 – 799
C	700 – 749
D	600 – 699
F	below 600

Attendance: A formal role will not normally be taken, but given the nature of a summer term course and since there will be a quiz or an exam almost every class period, you should attend every class.

Homework: Exercises from the textbook will be assigned on a regular basis to allow you to practice the topics that we cover in class. They will not be collected or graded, but it is greatly to your advantage to work on these exercises since questions on the quizzes and exams will generally be very similar to or taken directly from these exercises. As time permits, we will go over some of the exercises in class. Homework assignments will be posted on the course website.

Quizzes: Quizzes are worth 20 points each and will usually be given during every class when an exam is not scheduled. They will be over the topics covered in class since the previous quiz and will generally be very similar to exercises from the homework. Only your best 10 quiz scores will be included in the calculation of your overall grade. (Your lowest scores will be dropped.) There are no makeup quizzes.

Projects: There will be two projects assigned during the term and each will be worth 100 points. Details about the projects will be handed out in class and will be available on the course website. You may work together on the projects, but you must each turn in your own results and you must clearly indicate the names of all others you worked with on the project.
Project 1 will be due on Blackboard by Monday, June 18, 2007.
Project 2 will be due in class on Tuesday, July 3, 2007.

Exams: There will be three in-class exams during the term, each worth 200 points. Each exam will cover the material that we covered since the previous exam (or since the beginning of the term). I will give you at least two days advance notice of when an exam is scheduled. The date(s) will also be posted on the course website. If you are unable to be in class on a day an exam is scheduled, you must meet with me at least two days in advance to schedule a time to take the exam. If you miss an exam and did not meet with me in advance, you will not be allowed to take the exam unless you provide acceptable written documentation of your inability to attend due to illness or another reason that I deem acceptable.

Important Dates:

Wednesday, 6/6/07	Last day to drop without a W
Friday, 6/15/07	Last day to drop with a W
Wednesday, 6/27/07	Last day to drop with a WP/WF

Math Tutorial Center: The Math Tutorial Center is located in Ayres 322 and is open this summer on Tuesdays and Wednesdays from 9 am to 1 pm. It provides **free tutoring**. Please make use of this free service.

Disability Services: If you need course accommodations because of a documented disability or if you have emergency information to share, please contact the Office of Disability Services in 2227 Dunford Hall or at 865-974-6087.

Classroom Etiquette: Be on time. Turn off cell-phones and beepers during class. Do not read the newspaper or do other work during our class. Do not talk to classmates at inappropriate times.

Academic Standards of Conduct: All students are expected to abide by the University Honor Statement. In mathematics classes, violations of the honor statement include copying another person's work on any graded assignment or test, collaboration on a graded assignment without instructor's approval, using unauthorized "cheat sheets" or technical devices such as calculators, cell phones or computers for graded tests or quizzes, or other infractions listed in "Hilltopics". These violations are serious offenses, subject to disciplinary action that may include failure in a course and/or dismissal from the University. See "Hilltopics" for more complete information.

NOTE: The instructor reserves the right to make changes to this syllabus as necessary. If changes are made, they will be made available in writing and/or on the course website. If you have questions, please consult the copy of the syllabus on the course website first.

Math 123.001 – Finite Mathematics

Tentative Schedule

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
6/4/07	**6/5/07**	**6/6/07**	**6/7/07**	**6/8/07**
1.1 Real Numbers, Inequalities, and Lines	1.3 Functions 1.4 Functions, Continued	2.1 Simple Interest **Last day to drop without a W**	1.2 Exponents 1.5 Exponential Functions	1.6 Logarithmic Functions 2.2 Compound Interest
6/11/07	**6/12/07**	**6/13/07**	**6/14/07**	**6/15/07**
2.3 Annuities	2.4 Amortization	Review	**Exam 1**	3.1 Systems of Two Linear Equations in Two Variables **Last day to drop with a W**
6/18/07	**6/19/07**	**6/20/07**	**6/21/07**	**6/22/07**
3.2 Matrices and Linear Equations in Two Variables **Project 1 Due**	3.3 Systems of Linear Equations and the Gauss-Jordan Method	3.4 Matrix Arithmetic	3.5 Inverse Matrices and Systems of Linear Equations	Review
6/25/07	**6/26/07**	**6/27/07**	**6/28/07**	**6/29/07**
Exam 2	4.1 Linear Inequalities	4.2 Two-Variable Linear Programming Problems **Last day to drop with a WP/WF**	4.3 The Simplex Method for Standard Maximum Problems	4.3 The Simplex Method for Standard Maximum Problems
7/2/07	**7/3/07**	**7/4/07**	**7/5/07**	**7/6/07**
4.4 Standard Minimum Problems and Duality	4.5 Nonstandard Problems: the Dual Pivot Element and the Two-Stage Method **Project 2 Due**	**Independence Day** **No class**	Review	**Exam 3**