

ADMINISTRATIVE INFORMATION

Instructor: Kris Kissel
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Office: SMT 331
Office Hours: Daily 10:00-10:50 a.m. and by appointment

Class Meeting Time: Daily 8:00-8:50 a.m.
Class Meeting Place: SMT 222
Textbook: *Finite Mathematics and Applied Calculus*,
by Frank C. Wilson (REQUIRED)

Class Web Site: www.instruction.greenriver.edu/kkissel/156fall2007

Exams: Wednesday, October 17 (Exam #1)
Wednesday, November 14 (Exam #2)
Thursday, December 13 (Final Exam)

Prerequisite: Math 097 with a grade of 2.0 or higher,
or appropriate placement, or instructor's permission.

Calculator: A graphing calculator is required for this course.

COURSE DESCRIPTION

Study of graphs and solutions of linear equations; systems of equations; matrices; linear inequalities and linear programming; the simplex method; exponential and logarithmic functions; financial formulas; sets and set notation; permutations and combinations. Many problems and examples are drawn from the fields of business, economics, and social science.

CALCULATOR

A graphing calculator is required for this course. I will be using the TI-83+ calculator for class demonstrations. I recommend a TI-83, TI-83+, or TI-84. If you buy another calculator, I will not be able to assist you with its use, and you'll be expected to learn how to use it entirely on your own. If you would prefer not buying a calculator, you can rent one for the quarter from the Math Learning Center in SMT 355. You must have your own calculator because *sharing calculators on quizzes and exams is prohibited*.

CLASS FORMAT

We will use all of the following in this course: lectures, exams, quizzes, in-class activities and student presentations. Students will also submit homework for grading.

Attendance is very important! Since there are no make-ups for missed work, your grade will be affected by absences. I expect you to be here and to be on time each day. *Please make a decision today as to whether you can fulfill this obligation.*

WORK OUTSIDE CLASS

I will assign homework for you to submit for grading and some problems to share in class, but these will only be a portion of what I think you need to do to learn the material. I will also assign practice problems that you will not turn in, but you will be able to use that homework as notes on in-class quizzes (not exams). I strongly recommend you do all the assigned practice problems.

“Over the phone” work sessions or outside study groups are *strongly encouraged*. (Part of what I want you to learn in this course is how to communicate with mathematics effectively, in both written and verbal modes.) Plan on getting together with your group on a regular basis!

BEHAVIOR

Absolutely no cheating or plagiarism will be tolerated in this class. At the very least, a grade of zero will be given on the assignment. The consequences may be even more severe, at the instructor's discretion, up to and including a failing grade for the entire course.

Do not engage in any behavior that even makes the instructor *suspect* that you might be cheating, such as glancing at another student's quiz, talking during an exam or passing a note or calculator. The instructor may think you are cheating, but even if you are not, these would be unacceptable behaviors and subject to the same sanctions.

Respect of all others in this class is a necessity. Please refer to the GRCC Student Code of Conduct for rules governing appropriate behavior both inside and outside the classroom.

Behavior that disrupts the class, or that is distracting to students or instructor, is not allowed. Such behavior will result in *negative* credit for the in-class activities component of the grade since it detracts from the learning environment. If disruptive behavior persists, the instructor may require students to change their seat or to leave the classroom.

ADA STATEMENT

If you believe you qualify for course adaptations or special accommodations under the Americans With Disabilities Act, it is your responsibility to contact the Disability Support Services Coordinator in the LSC and provide the appropriate documentation. If you have already documented a disability or other condition through the GRCC Disability Support Services Office, which would qualify you for special accommodations, or if you have emergency medical information or special needs I should know about, please notify me during the first week of class. You can reach me by phone at 253-833-9111, x4506. Or, you can schedule an office appointment during my posted office hours or at another mutually determined time. If this location is not convenient for you, we will schedule an alternative place for the meeting. If you use an alternative medium for communicating, let me know well in advance of the meeting (at least one week) so that appropriate accommodations can be arranged.

INCLEMENT WEATHER AND OTHER CAMPUS EMERGENCIES

If an assignment or test is scheduled for a day when classes are cancelled due to emergency, students should expect the assignment or exam to be due the next day that class actually meets. If classes are cancelled a day immediately or shortly before something is due, but not on the due date itself, students should expect the due date to remain unchanged. If classes are cancelled for several days before an assignment or test is due, the instructor reserves the right to make changes to due dates as he deems appropriate. Announcements of such changes will be made on the class web site.

EVALUATION

Exams: You will be given three tests in this class covering most of Chapters 1 through 7, with each test covering approximately two or three chapters of the textbook. Each exam will be worth 20% of your grade. There will be *no make-up tests* except for reasons of serious illness, religious reasons or issues of grave personal import, and any missed test will receive a grade of 0. However, if you know that you will miss a test (or any assignment) due to an emergency, please notify me as soon as possible because sometimes arrangements can be made ahead of time. The final exam will be given in class on Thursday, December 13, from 8:00 to 9:50 a.m.. The final *will be comprehensive*. All exams will be *closed notes, closed book*.

Homework: There will be two types of homework in this class: daily exercises and weekly problems.

Short exercises will be assigned each day as practice for the recent material. Students are expected to complete those exercises by the next class and will receive credit for sharing their solutions with the class. Each student will be expected to share at least four essentially complete solutions over the course of the quarter, and this will make up 8 percent of the total grade for the course.

Students will also submit written homework solutions on Friday of each week (starting the first week) for a smaller assignment of problems, with the following exception: there will be no homework collected on November 23 because of the Thanksgiving break. These problem will usually be more involved than the daily exercises and will comprise 8 percent of the total grade for the course. The lowest score on this weekly assignment will be dropped.

Quizzes: There will be a quiz at the beginning of class each Tuesday, starting the second week, with the following exceptions: there will be a quiz on Wednesday, October 24 (because that Tuesday is Advising Day), and there will be no quiz on October 16 or November 13 (because you have an exam in each of those weeks). These quizzes will be *open notes, closed book*. Quizzes will be worth a total of 14% of your grade. The lowest quiz score will be dropped.

Activities: In-class activities will also count as 10 percent toward your grade. You must be in class to participate and there will be no way to make up any missed points.

Notebinder for Extra Credit: You will receive up to 2 percent extra credit at the end of the course for having maintained a binder with all of the following materials in it: the course syllabus; the daily homework exercises; the in-class worksheets; the quizzes and exams; graded weekly homework; notes you take throughout the course; and a cover sheet (which will be provided to you later) on which you have recorded all your scores throughout the course.

GRADING SYSTEM

The breakdown of your grade by percentage is as follows:

Exam #1, #2, Final Exam	20% each
Daily Homework	8%
Weekly Homework	8%
Quizzes	14%
In-class Activities	10%
Extra-credit Notebinder	2%

If you wish to take this class “Pass/No-Credit”, you must fill out a form at the Registrar’s Office. There is a deadline for doing this. If you are planning on taking another math class, you must receive a 2.0 or above in this class to continue. A “Pass” will not be sufficient to get you into the next course.

Here is a list of registration deadlines for the current quarter:

Last Day for:	Date:
Withdrawal Without Grades Posted on Transcript	October 12
Pass/No-Credit Petition or Official Withdrawal	November 16

Decimal grades reported for this class will range from 4.0 to 0.0. Generally, a grade of “I” (incomplete) will only be given for emergency situations and only if at least 75% of the work has been completed with a passing grade. The minimum grades that will be assigned are as follow:

Percentage	Decimal Grade	Percentage	Decimal Grade
99	4.0	76	2.1
97	3.9	75	2.0
95	3.8	74	1.9
93	3.7	73	1.8
91	3.6	72	1.7
90	3.5	71	1.6
89	3.4	70	1.5
88	3.3	69	1.4
87	3.2	68	1.3
86	3.1	67	1.2
85	3.0	66	1.1
84	2.9	65	1.0
83	2.8	64	0.9
82	2.7	63	0.8
81	2.6	62	0.7
80	2.5	61	0.6
79	2.4	60	0.5
78	2.3	BELOW 60	0.0
77	2.2		

ASSESSMENT OUTCOMES

The following GRCC Assessment Outcomes are applicable in this course:

Quantitative/Symbolic Reasoning:

1. Student evaluates and interprets information and data.
2. Student recognizes which processes or methods are appropriate for solving a given problem, and correctly implements those processes.
3. Student demonstrates the ability to estimate a solution to a presented problem.
4. Student translates data into formats such as graphs, tables, formulas, and sentences.

Critical Thinking:

1. Student provides reasons for the conclusions they reach and assess the relevance and adequacy of those reasons.
2. Student connects past learning with current topics.

LEARNING OBJECTIVES

Students will demonstrate the ability to:

1. solve systems of linear equations using each of the following methods:
 - a. substitution
 - b. elimination
 - c. Gaussian elimination
 - d. matrix algebra
 - e. graphing
 - f. calculator technology
2. interpret the results of solutions to equations and inequalities;
3. do the following matrix operations
 - a. scalar multiplication
 - b. matrix addition and subtraction
 - c. matrix multiplication
 - d. matrix inversion
4. solve linear inequalities using the following methods
 - a. graphing
 - b. algebra
5. graph linear inequalities
6. solve linear programming problems by:
 - a. the geometric method
 - b. the simplex method
7. solve equations involving exponential or logarithmic functions;
8. use simple and compound interest formulas to analyze and interpret linear and exponential growth.
9. use annuity formulas to determine future and present value of an investment.
10. use set notation and terminology and solve problems using Venn diagrams.
11. solve problems involving permutations and combinations.