

MA 130 03 – Finite Math – Fall 2008

INSTRUCTOR: Ed Miller
CREDITS: 4
PREREQUISITE: A grade of "C" or better in MATH 024 or MATH 025 or placement (ACT 19, SAT 470, Compass Algebra 46)
TEXT: *Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences* Eleventh Edition, Raymond A. Barnett, Michael R. Ziegler, Karle E. Byleen, 978-0-13-225570-7
OFFICE HOURS: MTWTh 10:30 A.M. – 12:00 M.
MW 1:30 P.M. – 3:00 P.M.
Also by appointment
OFFICE: MLH 120A
VOICE: 208-792-2810
FAX: 208-792-2064
E-MAIL: edmiller@lcsc.edu
WEB: www.lcsc.edu/edmiller

COURSE DESCRIPTION:

Math 130 is a collection of mathematical topics generally separate from the algebra-precalculus-calculus sequence of courses. It includes some theory of functions, mathematics of finance, linear algebra and linear programming, and basic probability theory. The topics are chosen to illuminate the use of mathematics as a modeling and decision tool in various fields of study. As part of the General Education curriculum, MATH 130 is designed to help students to understand mathematics as a logical construct and to manipulate associated abstract symbols. It should also help students to employ mathematics to solve problems. On a broader level, this and all Gen Ed courses should give you practice expressing ideas in clear, logical and grammatically correct written and spoken English.

Finite mathematics, while having some mechanical techniques imbedded in the course, is more focused on mathematical concepts. Consequently, a significant amount of technology will be used over the course of the semester in the form of Voyage 200 symbolic calculators. These devices are capable of standard scientific and graphing calculator functions as well as symbolic manipulation of mathematical expressions. As the course progresses, students will learn to employ both manual and machine techniques in all parts of the course.

Prerequisite knowledge for this course includes the ability to manipulate algebraic expressions and solve linear equations in one variable and graph linear equations/functions in the Cartesian plane.

If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible.

METHODS OF EVALUATION:

A variety of methods will be used to evaluate your performance in this course. The following table lists the evaluation categories, the approximate number of each type, and the percent of the course grade which each category comprises:

<u>Type</u>	<u>Number</u>	<u>Weight</u>
Skill Quizzes	15	0%
Exams	5	60%
Exercise Sets	44	20%
Final Exam	1	20%

Skill Quizzes (SQs) are short (typically half sheet) exercises designed to verify that you have learned the minimum baseline skills you need to succeed in this and later courses. Unless otherwise instructed, you may not use any technology to complete Skill Quizzes. SQs are graded complete/incomplete; you must receive a "COMPLETED" grade on all SQs in order to pass the course. You may repeat each SQ until completed. **All SQs must be completed by 5:00PM PST, Thursday, December 11, 2008.**

Exams are extensive checks of current student knowledge and understanding. Exams will occupy an entire class period; use of technology will be restricted in some sections of the exam. Make ups for Exams will be given only for legitimate excused absences. If you are going to miss an exam, please call or email me in advance. No Exam will be given early.

Exercise Sets will be selected mostly from the text book. These are exercises which I feel illustrate important points and provide excellent opportunities for you to learn through working them. Your best 40 Exercise Set grades will be used to determine the Exercise Set average. Exercise Sets are due at the end of class on the dates included in the assignment sheet. Late work will not be graded; however, you must turn in late sets as *Exercise Sets not submitted will be recorded as a zero and be averaged in with exercise sets turned in.*

The **Final Exam** is a comprehensive check of both skills and concepts contained in the course. It is scheduled for **Wednesday, December 17, at 9:00AM PST**. If you are going to miss the Final Exam, please call or email me in advance. No Final Exam will be given early.

GRADE CRITERIA:

In order to receive a minimum grade of "D", you must take all six exams, achieve a minimum 60% weighted average for the course, and receive a score of "COMPLETED" on all SQs given.

In order to receive a minimum grade of C/C+, you must take all six exams, achieve a minimum 70%/75% weighted average for the course, receive a score of "COMPLETED" on all SQs given, and submit at least two thirds of the Exercise Sets for evaluation.

In order to receive a minimum grade of B-/B/B+, you must take all six exams, achieve a minimum 80%/83%/87% weighted average for the course, receive a score of "COMPLETED" on all SQs given, and submit all of the Exercise Sets for evaluation.

In order to receive an A-/A grade, you must score sixty percent or better on each exam, achieve a minimum 90%/93% weighted average for the course, receive a score of "COMPLETED" on all SQs given, and submit all of the Exercise Sets for evaluation.

OTHER STUFF

Attendance is not mandatory for this class, but is highly recommended. Evidence indicates that there is a positive correlation between attendance and academic success.

**The last day to drop the course without notation is Monday, September 8.
The last day to withdraw from the course is Friday, October 31.**

Feel free to stop me at any time during class to ask questions. If you are having difficulties which are too extensive to be solved during class time, come to my office during office hours. If my office hours are difficult for you, we can make other mutually agreeable arrangements.

The Math/Science Tutoring Center is located in MLH 115, near the central stairwell. Many of the tutors are familiar with the material of this course. The Math Lab is an excellent place to go for help and support if you are having difficulties, or even if you are not.

The Writing Center is located in Spalding Hall, Room 115. Call 208-792-2433 to make an appointment for a free session with a peer consultant; drop-ins are also welcome. Students may also reach the Writing Center staff and some additional resources for writers through the On-line Writing Lab (www.lcsc.edu/writinglab).

Lewis-Clark State College recognizes LCMail as an official means of communication with students; you are responsible for monitoring your LCMail account. You have received information for logging in to this account as well as your WarriorWeb account. If you are unsure how to access these important resources, visit <http://www.lcsc.edu/> and click on the appropriate links.

ACADEMIC DISHONESTY:

In the event of academic dishonesty, those involved **will receive an "F" grade for the course** and the violation of the Student Code of Conduct will be referred to the Director of Student Life for judicial action.

As defined in the LCSC Student Handbook, Academic Dishonesty is:
(<http://www.lcsc.edu/osl/SHB/SHBcodeofconduct.htm>)

- a) **Cheating**—intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term "academic exercise" includes all forms of work submitted for credit hours.
- b) **Fabrication**—intentional and/or unauthorized falsification or invention of any information or the source of any information in an academic exercise.
- c) **Collusion** facilitating academic dishonesty—intentionally or knowingly helping or attempting to help another to commit an act of Academic Dishonesty.
- d) **Plagiarism**—the deliberate adoption or reproduction of ideas or words or statement of another person as one's own without acknowledgment.

According to the Student Code of Conduct,

The sanctions imposed for a violation of this section of the Code are independent of, and in addition to, any adverse academic evaluation which results from the student's conduct. The course instructor is responsible for academic evaluation of a student's work and shall make that evaluation without regard to any disciplinary action which may or may not be taken against a student under the Student Code of Conduct.

SOME LAST WORDS

For those of you who are new to the postsecondary world, one of the greatest differences between high school and college is in where responsibility for learning and motivation rests.

My job in this endeavor is to sort through the broad spectrum of topics which are lumped under the title "Finite Math" and pick out a set of topics of study, knit those topics into a picture which contains both an overall image and fine details, and present these to you variously through lectures and directed exercises. I accomplish this through the choice of the text and text exercises, choice of the kinds of exercises I will ask you to do outside the text, construction of tests and quizzes, and of course, construction and delivery of lectures.

Your job in this endeavor is to watch and listen to my exposition, read the text, work the various exercises, study the details, and reflect on the big picture of which the details are a part. Solid mechanics alone will not be enough to do well in this and succeeding courses; you must also have some understanding of the underlying principles and some facility at problem solving. Many of the exercises, despite having short answers, will take time to think through and understand before the light comes on, and it may only be a flickering light at first. This is a normal occurrence; what you need to provide, which I cannot, is persistence. The best advice I can give for success is to accept that a fair amount of confusion will likely come before (and after) you really understand what is going on.

The bottom line is that you have to learn this material. I can show it to you, give help and hints and moral support, but the final responsibility and credit for the learning is yours.