

MATH 12
FINITE MATH
3 UNITS

BUTTE COLLEGE
SPRING 2016
CTRL # 3322

THIS SYLLABUS WAS UPDATED ON MAY 2, 2016

Instructor: Ivan Zaigralin melikamp@melikamp.com

When emailing, please specify which class you are talking about, and make sure I can see your real name.

Office: LRC 262, MWF 10 am - 11 am, TTh 2:00 pm - 3:00 pm.

Class Meetings: TE 111, MWF 9:00 am - 9:50 am

Required Materials: *Finite Mathematics*, 8th edition, by Rolf (online portion not required). An older edition may suffice. The students are responsible for reading every section covered by the course outline at the end of the syllabus.

Catalog Description: Linear functions, systems of linear equations and inequalities, matrices, linear programming, mathematics of finance, sets and Venn diagrams, combinatorial techniques and an introduction to probability. Applications in business, economics and social sciences.

Objectives: Upon successful completion of this course, the student will be able to

- A. Apply linear and exponential graphs and functions.
- B. Write a system of linear equations to solve applied problems.
- C. Solve a system of linear equations using Gauss-Jordan elimination and interpret the result.
- D. Find the inverse of a square matrix and use the inverse to solve a system of linear equations.
- E. Solve linear programming problems in at least three variables.
- F. Find unions, intersections and complements of sets and use Venn diagrams to solve problems.
- G. Apply basic combinatorial principles to enumeration problems.
- H. Determine the probability of a specified event.
- I. Find the conditional probability of an event.
- J. Solve applied problems in finance including simple and compound interest, future and present value, annuities, sinking funds, and amortization.

Attendance: To succeed in this course, it is crucial that you come to class every day, alert and prepared to learn. Roll will be taken at the beginning of each class session. If you arrive after the class has started, please enter the room quietly and get on the roster at the end of the class. If you miss more than a half of a class session, you will be considered absent for that day. If you miss two or more classes during the first two weeks without

notifying me or the department secretary in advance, you will be dropped from the class. **If you miss 6 or more class sessions any time during the semester, you will be dropped from the class.** Exceptions will be made for documented cases of grave illness and/or family emergency.

Homework: Homework serves as practice and will prepare you to do your best on quizzes and tests. No make-up homework will be collected for any reason, but 2 lowest homework scores will be dropped. Homework will be graded for completeness and the amount of detail. **Homework is crucial for learning the material as well as for succeeding in this class.** Doing all homework is probably the most effective way to raise your test grades. You are welcome to work in groups while solving the homework, but you must submit your own work.

Quizzes: There will be 5 quizzes given. No make-up quizzes will be given for any reason. The lowest quiz score will be dropped and the four highest scores together will be worth 10% of the class grade.

Tests: There will be 4 tests. Together they will be worth 60% of the class grade. A makeup test will be given for documented cases of grave illness and/or family emergency.

Final: The final exam will be given on Wednesday, May 25, 8:00 am - 10:00 am. It will be worth 20% of the class grade. **You must attend the final in order to pass the class. If you miss the final, then you will get an F for the class.**

Grading:

<u>Letter Grades</u>		<u>Grade Breakdown</u>	
A	90-100%	Tests	60%
B	80-89%	Homework	5%
C	70-79%	Participation	5%
D	60-69%	Quizzes	10%
F	0-59%	Final	20%

Getting Help: If you have a question or a concern not addressed in this syllabus, please contact your instructor via email. Moreover, the campus provides some resources to help you study:

http://www.butte.edu/currentstudents/help_on_campus/

Tutoring: The Center for Academic Success (CAS) provides academic support services to Butte College students. It is located inside the Learning Resource Center on main campus and in CHC 230 and 231 at the Chico Center. CAS is open Monday through Thursday, 8:00 a.m. to 5:00,

and Friday 8:00 a.m. to 3:00 p.m. on main campus. Hours for CAS at the Chico Center are Tuesday through Thursday, 9:00 a.m. to 2:00 p.m., and Wednesday evening, 6:00 p.m. to 8:30 p.m. Free services include Tutoring, Computer Labs, Workshops, Group Study Rooms on main campus, and TIP Sheets. Students may take a Critical Skills for College Success half-unit course through CAS. For more information, go to <https://www.butte.edu/cas/>

Cell Phones, Computers: Cell phones are prohibited. The use of computers and tablets will be tolerated during regular class meetings as long as they are completely silent and don't distract other students. During quizzes, tests, and the final, only non-graphing calculators will be allowed (but not required).

Accommodations: If you have a learning disability, a physical disability, or other special needs, please let me know as soon as possible if you need special accommodations (such as extra time for tests). I will do my best to accommodate all needs verified through Disabled Students Programs and Services.

Students have the right to request reasonable modifications to college requirements, services, facilities or programs if their documented disability imposes a functional educational limitation or impedes access to such requirements, services, facilities, or programs. A student with a disability who will be requesting modification, accommodation, or access to an auxiliary aid is required and responsible for identifying himself/herself to the instructor and, if desired, to the Disabled Students Programs and Services (DSPS office). In either event, the student is responsible for providing appropriate documentation of his/her disability. Students who consult or request assistance from the DSPS office regarding specific modifications, accommodations or use of auxiliary aid will be required to meet timelines and procedural requirements established by the DSPS office.

Academic Honesty:

All instances of plagiarism and cheating will result in the score of zero for that homework, quiz, or test, and will be reported to the Dean's Office.

Tentative Outline: Changes will be announced in class.

MONDAY	WEDNESDAY	FRIDAY
Jan 25th 1	27th 2 Quiz 1, 2.1	29th 3 2.2
Feb 1st 4 2.2	3rd 5 2.3	5th 6 2.4
8th 7 2.5	10th 8 2.6	12th no classes
15th no classes	17th 9 2.6	19th 10 Review
22nd 11 Test 1	24th 12 3.1, 3.2	26th 13 3.3
29th 14 3.4	Mar 2nd 15 Review	4th 16 Quiz 2, 4.1
7th 17 4.1	9th 18 4.2	11th 19 4.2
14th spring break	16th spring break	18th spring break
21st 20 4.3, Review	23rd 21 5.1	25th 22 Test 2
28th 23 5.2	30th 24 5.3	Apr 1st 25 5.3, 5.4
4th 26 Review	6th 27 Quiz 3, 6.1	8th 28 6.2
11th 29 6.3	13th 30 6.4, 6.5	15th 31 6.6
18th 32 Review	20th 33 Test 3	22nd 34 7.1, 7.2
25th 35 7.2	27th 36 7.3	29th 37 7.4
May 2nd 38 7.5	4th 39 Review	6th 40 Quiz 4, 10.1
9th 41 10.2	11th 42 10.3	13th 43 10.4
16th 44 Test 4	18th 45 Review	20th 46 Review
23rd final week	25th Final 8:00 - 10:00 am	27th final week