

MATH 11
NATURE OF MATHEMATICS
3 UNITS

BUTTE COLLEGE
SPRING 2016
CTRL # 3321

THIS SYLLABUS WAS UPDATED ON MAY 4, 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 110, TTh 11:00 am - 12:15 pm

Required Materials: *A Survey of Mathematics with Applications, Expanded 9th edition*, by Angel, Abbott, Runde. Online portion is not required. An older edition should suffice. The students are responsible for reading every section covered by the course outline at the end of the syllabus.

Catalog Description: This course is a survey of mathematical concepts in a variety of areas. The topics include probability, statistics, set theory, measurement, geometry, and business finance.

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

- A. Perform set operations such as intersection, union, complement, difference, and Cartesian product.
- B. Solve applied problems using sets.
- C. Apply dimensional analysis in converting to and from the metric system and in solving measurement problems.
- D. Implement a variety of formulas in determining perimeter, area, and volume of geometric shapes.
- E. Solve applied problems using the Pythagorean Theorem.
- F. Solve applied simple and compound interest problems.
- G. Acquire skills in comparing fixed and open-ended installment loans.
- H. Implement the rules of probability in solving applied problems.
- I. Create graphical displays of data using histograms, frequency polygons, and stem-and-leaf plots.
- J. Generate, summarize, and interpret statistical data.

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 4 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 3 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 Tuesday, May 24, 10:00 am - 12:00 pm. 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:

Letter Grades		Grade Breakdown	
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.

TUESDAY		THURSDAY	
Jan 26th	1	28th	2
		Quiz 1, 2.1, 2.6	
Feb 2nd	3	4th	4
2.2		2.3	
9th	5	11th	6
2.4		2.5	
16th	7	18th	8
Review		Quiz 2, 3.1	
23rd	9	25th	10
3.1		3.2	
Mar 1st	11	3rd	12
3.3		3.4	
8th	13	10th	14
Review		Test 1	
15th		17th	
spring break		spring break	
22nd	15	24th	16
14.1		14.2	
29th	17	31st	18
14.3		14.3	
Apr 5th	19	7th	20
14.4		Quiz 3, 6.1	
12th	21	14th	22
6.1, 6.2		6.3	
19th	23	21st	24
6.4		Review	
26th	25	28th	26
Test 2		5.6, 4.3	
May 3rd	27	5th	28
4.3		Quiz 4, 8.1	
10th	29	12th	30
8.2, 8.3, 8.4		no class	
17th	31	19th	32
Test 3		Review	
24th		26th	
Final 10:00 am - 12:00 pm		final week	