

MATH 1030
QUANTITATIVE REASONING
SPRING SEMESTER, 2009
T,TH 10:30-11:45

Instructor: Kathryn Ott

Office: NIB 123

Phone: 673-8836 (home)

Hours: 10:00-10:30 T or by appointment

Course Text: The Nature of Mathematics, 11th ed.

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Prerequisites: C or better in Math 1010 or ACT Math score of 23 or higher.

Attendance: Attendance is essential and roll will be taken. Tardiness will be frowned upon and may invoke the ire of the instructor. There will likely be minor changes in the course schedule that will be announced in advance in class. *You will be held accountable for all information presented during class.*

Homework: Homework assignments are due the day of the test and will be collected in class. If you are ill and unable to attend, homework may be turned in at the math department office on the due date or before. Tell the secretary to put it in my box. **Late assignments receive half credit, and are only accepted until the week after the test on that chapter.** Your work should be neat and easily followed, and you must show work to receive credit on a problem. Each homework section is worth 3 points and will be graded on number of problems completed. Homework is a significant portion of your grade (150 points) and is important for success in this course.

Exams: Each student is expected to take the exams as scheduled in the syllabus or as changed in class. If there is a personal emergency, the instructor must be contacted before the scheduled exam time. Each exam is worth 100 points. Instead of a comprehensive final exam, a project, consisting of a written report and oral presentation, is required for this course.

General remarks: Course schedules, assignments, and exam dates are subject to change as circumstances dictate. If it is determined that you cheated on an exam or project you will receive a 0 for that exam or project. If there is a second offense, you will receive an F for the course. If you are a student with a medical, psychological, or learning disability and need accommodations, contact the Disability Resource Center (652-7516) in the Student Services Center. The Disability Resource Center will determine your needs and the appropriate accommodations related to your disability. I will do everything reasonably possible to help you be successful in learning the material in this class.

COURSE OBJECTIVES

All mathematics classes at Dixie College will:

- Require students to perform mathematical processes including fractions, percentages, decimals, proportions/ratios, algebraic equations and/or calculus techniques.
- Provide students with application problems that use a variety of methods including arithmetical, algebraic and geometric methods.
- Challenge students to make inferences from mathematical models that include formulas, graphs and tables.
- Provide students with real-life applications that use a variety of mathematical functions.

Upon successful completion of Math 1030, a student will demonstrate through testing and projects the ability to:

- Use algebra to graphically represent and analyze linear, quadratic, exponential, and logarithmic models.
- Assess methods of geometry used in artistic representations of the world.
- Identify aspects of logic used to solve complex problems and use logic to make sound decisions in personal and business life.
- Use trigonometry to solve triangles and related applications.

- Use principles of finance to calculate simple and compound interest, values of annuities, and amortization schedules.
- Apply the concepts of probability to calculate outcomes and the corresponding odds in the games that people play.
- Use statistic techniques to organize, display, and analyze data, especially as it applies to situations in the real world.

Grades: Your semester grade will be based on the following scale: **A**(92-100%), **A-**(89-92%), **B+**(86-89%), **B**(82-86%), **B-**(79-82%), **C+**(76-79%), **C**(72-76%), **C-**(69-72%), **D+**(66-69%), **D**(62-66%), **D-**(59-62%), **F**(0-59%).

ASSIGNMENT SCHEDULE

Week of:

JAN 5	Intro		7.4	3-9,15-33(x3),45,53
	1.1	6-24(x3)	MAR 2	7.5
	1.2	6-42(x3),53,57		9-29(x4),31-45odd, 51-57(x3)
	1.3	9-36(x3),55,60		7.6
JAN 12	2.1	9-27(x3),33,35		10-12,22-25,38-41
	2.2	6-18(x3),30-51(x3),53-56		7R
	3.1	7-55(x4)		1,6-8,10-15
	3.2	5-47(x3)		REVIEW
				MAR 5-6 Exam 4 (testing center)
			MAR 9	9.1
				6-54(x3)
				9.2
				4-49(x3)
				9.3
				9-53(x3)
				9.4
				5-53(x3)
				MAR 16-20 Spring Break!
			MAR 23	11.1
				13-21 odd,31-52(x3),53,55
				11.2
				7-49(x3)
				11.5
				7-55(x4)
				11.6
				5-53(x4)
				11.7
				12-31
			MAR 30	9R
				4-19
				11R
				7-20
				REVIEW
				Apr 2 Exam 5 (in class)
			APR 6	13.1
				4-46(x3)
				13.2
				6-45(x3)
				13.3
				7-51(x4)
				12R
				1-10
				13.3
				5-38(x3)
				14.1
				5-21 odd
			APR 13	14.2
				13-37(x3),49
				14.3
				4-16(x3),24-39,48,56
				13R
				1-20
				14R
				1-8,10-12
				REVIEW
				Apr 16 Exam 6 (in class)
			APR 20	Presentations
			APR 30	9:30-11:30
				scheduled final day—
				see instructor. This day subject to
				change.
				FEB 19 Exam 3 (in class)
FEB 23	7.1	9-33(x4), 54-58		
	7.2	9-27(x3),35-43,50		
	7.3	10-25(x3),33,35		