

MATH 1050: PRECALCULUS I
4 CREDIT HOURS
SPRING SEM. 2009
CLASSROOM: TEC 102

INSTRUCTOR: MORTENSEN
OFFICE: NIB 133B
PHONE: 652-7764
OFFICE HOURS:8-9, TBA

TEXTBOOK: COLLEGE ALGEBRA; Lial, Hornsby, Schneider

MATERIALS NEEDED Graphing Calculator is required. The teacher will use the TI-89.

MATHEMATICS AT DIXIE COLLEGE. All classes in mathematics at Dixie College support the general education goal of the college. Within the limitations imposed by the nature of mathematics (i.e. the dependency on prior learning and the need for content fluency), each class 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

Purpose of Math 1050, College Algebra/Precalculus

The primary purpose of Math 1050 is to intensify the skills learned in the student's previous math class. This class is principally for those students moving on to a Calculus or Physics series, although it can be used to fulfill the general education requirements of Dixie College or other colleges and universities.

Objectives: Upon successful completion of Math 1050, a student will demonstrate through testing

- Apply functional notation.
- Determine symmetries that exist in the graph of an equation.
- Graph polynomial functions and find their intercepts, maxima, and minima.
- Analyze the key components of the graph of polynomial and rational functions.
- Compute the composition and inverses of functions.
- Graph exponential and logarithmic functions
- Apply properties of logarithms and exponents in simplifying expressions and solving equations.
- Solve systems of linear equations using substitution, eliminations, matrices, and Cramer's Rule
- Perform matrix arithmetic, including determinants
- Solve non-linear systems of equations and inequalities
- Find terms and sums of terms of arithmetic and geometric sequences and series.
- Compute the terms of a binomial expansion.

CLASS ATTENDANCE: In order to be successful in mathematics, you must choose to attend class on a regular basis. Statistics have definitely shown that grades improve with better attendance. Make-up exams as a general rule will not be given, the teacher may allow them in **rare** cases.

CLASS PARTICIPATION: Be willing to be involved in the class as an active participant. Ask questions, contribute toward solutions, and be interested in the class activities. In order to be successful, you must be involved as a participant, not on the sidelines as a spectator.

MAKING A FRIEND IN THE CLASS: Attempt to make a friend in your class. You may find you enjoy sitting together and drawing support and encouragement from one another. Study together whenever possible!!

GETTING HELP: Getting the right kind of help at the right time can be a key ingredient to being successful in math. When you have gone to class on a regular basis, taken careful notes, read your text carefully, diligently done your homework, thus making every effort possible to learn the mathematical skills, you may find that you are still having difficulty. If this is the case, then you need to seek help. Make an appointment with the instructor to find out what help is available to you in the form of instructor time, tutoring service, math labs and computer software.

HOMEWORK ASSIGNMENTS: Keep in mind that math is a skill that can only be learned and mastered by doing it yourself with lots and lots of practice. **There is no other way!** Set aside some time each day for doing homework assignments. Do not attempt to do a whole chapter's assignments at one sitting. That is a disaster! **A minimum of two hours** spent studying outside of class for each hour in class is usually required for college courses.

GRADING: During the quarter, six 100-point tests will be given. These will contain multiple choice questions. Also on the day after the test, all homework for that chapter(s) will be due. The homework is graded on completion and is worth 20 points each chapter. The final exam will be **comprehensive** and worth approximately 200 points. **All** tests will count toward your grade. The lowest test score can be replaced by the percent on the final exam. Make-up exams as a general rule will not be given, the teacher may allow them in **rare** cases. **Reading quizzes will be given at the discretion of the teacher.**

Also during the quarter, you will be required to read an article from a current periodical dealing with a contemporary math topic. On one page you will tell the name of the article and the periodical and then summarize the article. This will be due at midterm and be worth 25 points.

CODE OF CONDUCT: Dishonesty, including, but not limited to, cheating, plagiarism, or knowingly furnishing false information to the college, will result in expulsion from the class.

GRADING SCALE:

94%-100%=A	90%-93%=A-	87%-89%=B+	83%-86%=B
80%-82%=B-	75%-79%=C+	70%-74%=C	65%-69%=C-
60%-64%=D+	55%-59%=D	50%-54%=D-	0%-50%=F

DISABILITY STATEMENT

"If you are a student with a medical, psychological, or learning disability or think you might have a disability and would like accommodations, contact the Disability Resource Center (652-7516) in the Student Services Center. The Disability Resource Center will determine eligibility of the student requesting special service and determine the appropriate accommodations related to their disability."

**COLLEGE ALGEBRA/PRECALCULUS
SPRING 2010(MTWF)**

27-46 ALL, 47-59 E.O.O. X 55D

**(This is a tentative schedule. The teacher
has the right to modify if necessary)**

<u>DATE</u>	<u>SEC.</u>	<u>ASSIGNMENT</u>				
			23	3.2	1-33 E.O.O., 15,41,43,45	
			24	3.3	5,7,9,17,19,21,27,29,41,43,45, 49,63,97,99	
JAN.	11	R.4			1-73, 79-103 E.O.O.	
	12	R.4	26	3.3.	CONT.	
	13	1.1.			1-65 E.O.O. & 3,7	
17, 25	15	1.2			1-11 ODD, 15-39 E.O.O. &	
			MAR.	1	3.6	1,3,7-10 ALL, 11-39 E.O.O., 25
JAN.	18	MARTIN LUTHER DAY NO SCHOOL		2		CHAPTER 3 REVIEW
				3		CHAPTER 3 TEST
	19	1.3		5	4.1	1-17 ODD, 19-26 ALL, 35-79 E.O.O., 77
	20	1.4				1-77 E.O.O. & 3,7,31
	22	1.5	MAR.	8-12		SPRING BREAK - NO SCHOOL
JAN.	25	1.6	MAR.	15	4.2	1-25, 49-77 E.O.O., 71,75,83
	26	1.7		16	4.3	1-29, 59-87 ODD & 91
				17	4.4	1-81 E.O.O., 3,7,47, X57
85, 89	27	1.8		19	4.5	1-77 E.O.O., 12,23,39,60,71,75
	29		MAR.	22	4.5	CONT.
		CHAPTER 1 REVIEW				
FEB.	1			23	4.6	1-4 ALL, 5-41 E.O.O. & 20, X17
		CHAPTER 1 TEST				
	2	2.1		24		CHAPTER 4 REVIEW
	3	2.2.		26		CHAPTER 4 TEST
	5	2.3	MAR.	29	5.1 5.3	9-53 E.O.O., 69,73,77 TBA
FEB.	8	2.4		30	5.5	1-33 E.O.O., 47,51,55
ALL,				31	5.6	1-17, 29-45 E.O.O., 71,73,75,79,81
	9	2.5	APR.	2	5.6	CONT.
		1-4 ALL, 5-57 E.O.O. & 59				
	10	2.6	APR.	5	6.1	1-41 E.O.O., 31,39,51,53, X13,17
		1-10 ALL, 11-47 E.O.O. & 45, 49, 50 X 31, 43				
	12	2.7		6	6.2	1,5,15,17,25,43,48
		1,3,5,9,15,21,31,33,35,37,41,45,53, 55, 61,65,67-72		7	6.2 6.3	CONT. TBA
FEB.	15	PRESIDENTS DAY- NO SCHOOL				
	16	2.8		9		CHAPTERS 5 & 6 REVIEW
		1-85 E.O.O.				
	17		APR.	12		CHAPTERS 5 & 6 TEST
		CHAPTER 2 REVIEW				
	19			13	7.1	7-43, 53-65 E.O.O., 25, 77
		CHAPTER 2 TEST				
FEB.	22	3.1		14	7.2	1-61 E.O.O., 23,69,72,73, X29
		1,3,5-8 ALL, 12, 13-25 ODD,				

	16	7.3	5-41 E.O.O., 57,61,64,65
APR.	19	7.4	1-45 E.O.O., 42,47,49
	20	7.4	CONT.
	21	7.6	1-61 E.O.O., 35,39,55
	23	7.7	1-33 E.O.O., 35
APR.	26		CHAPTER 7 REVIEW
	27		CHAPTER 7 TEST
	28		FINAL REVIEW
	29		FINAL REVIEW
MAY	3		FINAL EXAM 9:30-11:30