

SYLLABUS — MATH 1050

College Algebra / Pre-Calculus

CRN# 23483

Spring Semester 2010

TTh 7:30-9:10 p.m.

NIB 133

OBJECTIVES: All classes in mathematics at Dixie State College support the general education goal of the college, and 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 arithmetic, 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.

(PREREQUISITE: C or better in Math 1010, or ACT score of 23 or higher)

Upon successful completion of this course, students will demonstrate through testing the ability to:

1. Solve linear and quadratic equations and inequalities, including both application and modeling problems.
2. Determine the slope, midpoint, distance between points, and equations for lines or line segments in a Cartesian coordinate system.
3. Interpret and apply functional notation in the computation of function operations, composition, and inverses.
4. Graph polynomial functions and find intercepts, maxima, minima, and symmetries that exist.
5. Analyze the key components of the graphs of polynomial and rational functions.
6. Graph basic exponential and logarithmic functions.
7. Apply properties of exponents and logarithms in simplifying expressions and solving equations.
8. Solve systems of linear equations using substitution, elimination, and Cramer's rule.
9. Solve nonlinear systems of equations and inequalities.
10. Find terms and sums of terms of arithmetic and geometric sequences.
11. Compute the terms of a binomial expansion.
12. Perform basic counting, combination, permutation, and probability calculations.

*** IMPORTANT INFORMATION FOR SPRING 2010:

<http://new.dixie.edu/reg/?page=spring2010>

CALCULATORS: A scientific calculator is required. The TI-83 Plus/84 will be used in class.

EXAMINATIONS: Each student is expected to take examinations as scheduled in the syllabus or announced in class. A final comprehensive exam will be given at the end of the term. The lowest test score may be replaced with the percent earned on the final exam.

ATTENDANCE: Attendance is essential for success in the course.

ASSIGNMENTS: Doing homework in a timely manner is essential for success in the course.

HELP: Extra help is available from:

- Math Lab tutors, 10 a.m. – 2 p.m. weekdays
- Browning Resource Center
- Phone-Line Tutoring Center (in case of illness), by calling the Wellness Center at 652-7755
- Your instructor, during posted office hours, or at other times by appointment

Instructor:	Barbara A. Talley
Office:	NIB 123
Office Hours:	MTWTh 1:00–2:00 p.m. TTh 6:30–7:30 p.m.
Office Phone:	652-7991
Math Dept. Phone:	652-7984
Cell Phone:	801-361-4096
Email:	talley@dixie.edu
Textbook:	<u>College Algebra, 10th Ed.</u> (Lial, Hornsby, Schneider)

6 Tests @ 100 points each — 600 points
Homework and Quiz Grades — 200 points
Final Exam — 200 points

GRADING:

A (94.0–100%)	C- (65.0–69.9%)
A- (90.0–93.9%)	D+ (60.0–64.9%)
B+ (87.0–89.9%)	D (55.0–59.9%)
B (83.0–86.9%)	D- (50.0–54.9%)
B- (80.0–82.9%)	F (0–49.9%)
C+ (75.0–79.9%)	
C (70.0–74.9%)	

If you are a student with a medical, psychological, or learning disability, contact the Disability Resource Center (652-7516) in the Student Services Center to determine appropriate accommodations related to your special needs.

ASSIGNMENTS — MATH 1050, SECTION 51, SPRING 2010 — TTh 7:30-9:10 PM

Day	Date	Section	Assignment
T	1.12.10	R.5	11-67 EOO
		1.1	1-9 ODD, 13-65 EOO, 31, 33, 43 (X37, X53)
Th	1.14.10	1.2	1-11 ODD, 15-39 EOO
		1.3	7-15 ODD, 17-77 EOO, 69, 71, 75, 83
T	1.19.10	1.4	13-77 EOO, 31
Th	1.21.10	1.5	1-4, 5-45 EOO, 23, 57 (X25)
		1.6	1-77 EOO, 27, 93, 97
T	1.26.10	1.7	1-45 EOO, 55-60, 12, 38, 39, 69, 73, 77, 95
		1.8	1-8, 9-65 EOO, 81, 85, 89
Th	1.28.10		REVIEW (Test 1 in Testing Center – days/times to be announced)
T	2.2.10	2.1-2.2	2.1: 13-57 EOO (X41) 2.2: 3-27 EOO, 37, 41, 49
		2.3	1-13 EOO, 17-22, 23-83 EOO
Th	2.4.10	2.4	1-6, 9-21 EOO, 25-28, 31-55 EOO, 59-65
		2.5	1-4, 5-57 EOO, 47, 59
T	2.9.10	2.6	1-10, 11-47 EOO, 45, 49, 50
		2.7	1, 3, 5, 9, 15-18, 21, 31-37 ODD, 41, 45, 53, 55, 61, 65, 67-69
Th	2.11.10	2.8	1-85 EOO
			REVIEW (Test 2 in Testing Center – days/times to be announced)
T	2.16.10	3.1	1, 3, 5-8, 12, 15-23 ODD, 27-46, 47-59 EOO (X55d)
Th	2.18.10	3.2	1-33 EOO, 15, 41, 43, 45
		3.3	5, 7, 9, 17, 19, 27, 29, 41, 43, 45, 49, 97, 99
T	2.23.10	3.4	1-9, 15, 19-29 ODD, 33, 37
		3.5	9-17, 19, 21, 61, 65, 67, 87, 91
Th	2.25.10	3.6	1, 3, 7-10, 11-39 EOO, 25
			REVIEW
T	3.2.10		REVIEW (Test 3 in Testing Center – days/times to be announced)
Th	3.4.10	4.1	1-17 ODD, 19-26, 35-79 EOO, 77
		4.2	1-25 EOO, 49-77 EOO, 71, 75, 83
T	3.16.10	4.3	1-29 ODD, 59-87 ODD
		4.4	1-9 ODD, 13-81 EOO, 47 (X57)
Th	3.18.10	4.5	1-61 EOO, 12, 23, 39, 60, 69-77 ODD
		4.6	1-4, 5, 9, 13, 19-21, 25-41 EOO, 42
T	3.23.10		REVIEW (Test 4 in Testing Center – days/times to be announced)
Th	3.25.10	5.1	9-53 EOO, 35, 69, 73, 77
		5.3	1-45 EOO, 61, 63, 65, 75
T	3.30.10	5.5	9-33 EOO, 47, 51, 54
		5.6	1-17 EOO, 29-45 EOO, 71, 73, 76, 79
Th	4.1.10	6.1	1-37 EOO, 31, 39, 51, 53
		6.2-6.3	6-2: 1-25 EOO, 43 6-3: 1-4, 5, 9, 13, 31, 35
T	4.6.10		REVIEW
Th	4.8.10		REVIEW (Test 5 in Testing Center – days/times to be announced)
		7.1	7-43 EOO, 53-61 EOO, 25, 77
T	4.13.10	7.2	1-61 EOO, 23, 69-72 (X29)
		7.3	5-41 EOO, 57, 61, 64, 65
Th	4.15.10	7.4	1-49 EOO, 43, 47
		7.6	1-61 EOO, 35, 39, 55
T	4.20.10	7.7	1-21 EOO, 23-25, 31-35
			REVIEW
Th	4.22.10		REVIEW
T	4.27.10		TEST 6 (in class)
Th	4.29.10		REVIEW FOR FINAL
T	5.4.10		FINAL EXAM (7:30-9:30 PM)