

SYLLABUS — MATH 1050

College Algebra / Pre-Calculus

CRN# 43712

Fall Semester 2009

MTWThF 12:00-12:59 p.m.

NIB 107

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 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.

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

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

1. Apply functional notation.
2. Determine symmetries that exist in the graph of an equation.
3. Graph polynomial functions and find their intercepts, maxima, and minima.
4. Analyze the key components of the graph of polynomial and rational functions.
5. Compute the composition and inverses of functions.
6. Graph exponential and logarithmic functions.
7. Apply properties of logarithms and exponents in simplifying expressions and solving equations.
8. Solve systems of linear equations using substitution, elimination, matrices, and Cramer's rule.
9. Solve non-linear systems of equations and inequalities.
10. Find terms and sums of terms of arithmetic and geometric sequences and series.
11. Compute the terms of a binomial expansion.

CALCULATORS: A graphing 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. Make-up exams will be given at the discretion of the instructor, and only if arrangements have been made prior to the scheduled exam. 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: I will be available to provide extra help during posted office hours or at other times by appointment. Extra help is also available from tutors in the Math Lab from 10 a.m. – 2 p.m. each weekday, and in the Browning Resource Center.

Instructor:	Barbara A. Talley
Office:	NIB 123
Hours:	MTWTh 1:00–2:00 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
Quizzes — 200 total points
Final Exam — 200 points

GRADING:

A (94–100%)	C+ (75–79%)	D+ (60–64%)
A- (90–93%)	C (70–74%)	D (55–59%)
B+ (87–89%)	C- (65–69%)	D- (50–54%)
B (83–86%)		F (0–49%)
B- (80–82%)		

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 the appropriate accommodations related to your disability.

ASSIGNMENTS — MATH 1050, SECTION 10B, FALL 2009 — MTWThF 12:00-12:59 PM

Day	Date	Section(s)	Assignment
M	10.5.09	R.4 R.5	1-73 EOO, 79-103 EOO 1-69 EOO
T	10.6.09	1.1	1-9 ODD, 13-65 EOO
W	10.7.09	1.2	1-11 ODD, 15-39 EOO, 17, 25
Th	10.8.09	1.3	1-7 ODD, 9-77 EOO, 69, 71, 75, 83, 87
F	10.9.09	1.4	1-9 ODD, 13-77 EOO, 31
M	10.12.09	1.5 1.6	1, 3, 5, 9-41 EOO, 57 1-77 EOO, 27, 93, 97
T	10.13.09	1.7 1.8	1-53 EOO, 55-59, 61-77 EOO, 12, 38, 39, 95 1-8, 9-65 EOO, 81, 85, 89
W	10.14.09		REVIEW (Test in the Testing Center – days/times to be announced)
M	10.19.09	2.1 2.2	13-57 EOO (X41) 3-27 EOO, 37-41 EOO, 49
T	10.20.09	2.3	1-13 EOO, 17-22, 23-83 EOO
W	10.21.09	2.4	1-6, 9-21 EOO, 25-28, 31-55 EOO, 59-65
Th	10.22.09	2.5	1-4, 5-57 EOO, 47, 51, 59
F	10.23.09	2.6	1-10, 11-47 EOO, 45, 49, 50
M	10.26.09	2.7	1, 3, 5, 9, 15, 21-37 ODD, 41, 45, 53, 55, 61, 65, 67-72
T	10.27.09	2.8	1-85 EOO
W	10.28.09		REVIEW (Test in the Testing Center – days/times to be announced)
Th	10.29.09	3.1	1, 3, 5-8, 12, 13-25 ODD, 27-46, 47-59 EOO (x55d)
F	10.30.09	3.2 3.3	1-33 EOO, 15, 41, 43, 45 5, 7, 9, 17, 19, 21, 27, 29, 41, 43, 45, 49, 63, 97, 99
M	11.2.09	3.4	1-9, 15, 19-29 ODD, 33, 37, 41
T	11.3.09	3.5	9-17, 19, 21, 61, 65, 67, 68, 89, 91
W	11.4.09	3.6	1, 3, 7-10, 11-39 EOO, 25
Th	11.5.09		REVIEW (Test in the Testing Center – days/times to be announced)
F	11.6.09	4.1	1-17 ODD, 19-26, 35-79 EOO, 77
M	11.9.09	4.2	1-25 EOO, 49-77 EOO, 71, 75, 83
T	11.10.09	4.3	1-29 ODD, 59-87 ODD, 91
W	11.11.09	4.4	1-9 ODD, 13-81 EOO, 47 (X57)
Th	11.12.09	4.5	1-77 EOO, 12, 23, 39, 60, 71, 75
F	11.13.09	4.6	1-4, 5-41 EOO, 20 (X17)
M	11.16.09		REVIEW (Test in the Testing Center – days/times to be announced)
W	11.18.09	5.1	9-53 EOO, 69, 73, 77
Th	11.19.09	5.3	1-45 EOO, 61, 63, 65, 75
F	11.20.09	5.5	1-37 EOO, 47, 51, 55
M	11.23.09	5.6	1-17 EOO, 29-45 EOO, 71, 73, 75, 79, 81
T	11.24.09	6.1	1-41 EOO, 31, 39, 51, 53 (X13, X17)
M	11.30.09	6.2 6.3	1-25 EOO, 43, 48 1-4, 5, 9, 13, 31, 35
T	12.1.09		REVIEW (Test in the Testing Center – days/times to be announced)
W	12.2.09	7.1	7-43 EOO, 53-65 EOO, 25, 77
Th	12.3.09	7.2	1-61 EOO, 23, 69, 72, 73 (X29)
F	12.4.09	7.3	5-41 EOO, 57, 61, 64, 65
M	12.7.09	7.4	1-29 EOO, 33, 37, 41, 42, 47, 49
T	12.8.09	7.6 7.7	1-61 EOO, 35, 39, 55 1-33 EOO, 35
W	12.9.09		Review (Test in the Testing Center – days/times to be announced)
Th	12.10.09		FINAL REVIEW
F	12.11.09		FINAL REVIEW
M	12.14.09		FINAL EXAM (12:30-2:30 PM)