

**Syllabus—Math 1050**

**College Algebra/Pre-calculus CRN # 24379**

**Spring Semester, 1012 TR 7:30 pm to 9:10 pm room 205**

**Instructor: Mary Janice Richmond**

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**Credits: 4 hours**

**Text: "College Algebra" tenth edition**

**Lial, Hornsby, Schneider**

**OBJECTIVES:** All classes in mathematics at Dixie 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.

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 inverse 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 binomial expansion.

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

**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 and the appropriate accommodations related to your disability.**

**CALCULATORS:** A graphing calculator is required. The TI-83/84 will be used in class and is highly recommended.

**CLASS ATTENDANCE:** In order to be successful in mathematics, you must choose to attend class on a regular basis. Statistics have shown that grades improve with better attendance. Each class period there will be participation/quiz questions worth 10 points that are scored and entered in as part of your grade. This can't be made up. Quiz questions will come from the last assignment but will have a different set of numbers than the problems worked in the homework—knowing the process is what is important.

**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. **A minimum of two hours** spent studying outside of class for each hour in class is usually required for college courses. Homework assignments are due the beginning of the next class period. Late homework will not be accepted. Put all homework together, fold it in half lengthwise and at the top outside corner include: (for example).

John Doe  
Math 1050, 7:30  
Ch 1  
All— or # not done

**HELP:** I am available for 15 minutes before class for help. There are also tutors available in the Browning Resource Center and the NIB.

**EXAMINATIONS:**

Each student is expected to take examinations as scheduled in the syllabus. A final comprehensive exam will be given at the end of the term in class and cannot be taken early. The lowest test score can be replaced with the percent earned on the final exam.

During the quarter, six 100 point tests will be given. These will contain multiple choice questions. 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.

**GRADING:** Grades are weighted and **not** on a total point basis. The assignments are 7.5% of your grade, attendance and participation quizzes are 7.5% of your grade, and tests are 85% of your grade.

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

Date	Lecture	Homework Assignments <b>JANUARY</b>
<b>10-Jan</b>	R.4	1-73 EOO, 79-103 EOO
<b>Thr</b>	1.1	1-65 EOO, 3, 7
<b>12-Jan</b>	1.2	1-11 ODD, 15-39 EOO, 17, 25
<b>Tue</b>	1.3	1-77 EOO, 3, 7, 83, 87
<b>17-Jan</b>	1.4	1-77 EOO, 3, 7, 31
<b>Tue</b>	1.5	1-45 EOO 3, 57
<b>19-Jan</b>	1.6	1-77 EOO, 27, 93, 97
<b>Thr</b>	1.7	1-53 EOO, 55-59 ALL, 61-77 EOO, 95
<b>24-Jan</b>	1.8	1-8 ALL, 9-65 EOO, 81, 85, 89
<b>Tue</b>	Review Test	Chapter 1 Test at testing center Wed to Fri
<b>26-Jan</b>	2.1	13-57 EOO (X41)
<b>Thr</b>	2.2	3-27 EOO, 37-49 EOO
<b>31-Jan</b>	2.3	1-13 EOO, 17-22 ALL, 23-83 EOO
<b>Tue</b>	2.4	1-6 ALL, 9-21 EOO, 25-28 ALL, 31-55 EOO, 59-65 ALL
<b>FEBRUARY</b>		
<b>2-Feb</b>	2.5	1-4 ALL, 5-57 EOO, 59
<b>Thr</b>	2.6	1-10 ALL, 11-47 EOO, 45, 59, 50
<b>7-Feb</b>	2.7	1-69 EOO, 3, 15, 31, 67, 68, 70, 71, 72
<b>Tue</b>	2.8	1-85 EOO
<b>9-Feb</b>	Review	Chapter 2 Test at testing center Fri to Mon
<b>Thr</b>	Test 2	
	3.1	1, 3, 5-8 ALL, 12, 13-23 ODD, 37-46 ALL, 47-59 EOO, 28, 30, 67
<b>14-Feb</b>	3.2	1-33 EOO, 15, 41, 43, 45
<b>Tue</b>	3.3	5, 7, 9, 17, 19, 21, 27, 49
<b>16-Feb</b>	3.4	1-9, 15, 19-29 ODD, 33-41 EOO
<b>Thr</b>	3.5	9-17, 19, 21, 61, 65, 67, 68, 89, 91
<b>21-Feb</b>	3.6	1, 3, 7-10ALL, 11-39 EOO 25
<b>Tue</b>	Review Test 3	Chapter 3 Test at testing center Wed to Fri
<b>23-Feb</b>	4.1	1-17 ODD, 19-26 ALL, 35-79 EOO, 77
<b>Thr</b>	4.2	1-35 EOO, 49-77 EOO, 71, 75, 83
<b>28-Feb</b>	4.3	1-29 ODD, 59-87 ODD, 91
<b>Tue</b>	4.4	1-81 EOO (X57), 3, 7, 47
<b>MARCH</b>		
<b>1-Mar</b>	4.5	1-77 EOO, 12, 23, 39, 60, 71, 75
<b>Thr</b>	4.6	1-4 ALL, 5-41 EOO (X17), 20
<b>6-Mar</b>	Review	
<b>Tue</b>		
<b>8-Mar</b>	Test 4	Chapter 4 Test IN CLASS
<b>Thr</b>		
<b>Spring</b>	Break	March 12 to 16

<b>20-Mar</b>	5.1	9-53 EOO, 69, 73, 77
<b>Tue</b>	5.3	1-45 EOO, 61, 63, 65, 75
<b>22-Mar</b>	5.5	1-37 EOO, 47, 51, 55
<b>Thr</b>	5.6	1-17 EOO, 29-45 EOO, 71, 73, 75, 79, 81
<b>27-Mar</b>	6.1	1-41 EOO, (X13, 17) 31, 39, 51, 53,
<b>Tue</b>	6.2	1-25 EOO, 15, 43, 48, (X33)
<b>29-Mar</b>	6.3	1-4, 5, 9, 13, 31, 35
<b>Thr</b>	Review	Chapter 5 & 6 Test at the testing center Fri to Mon
	Test 5	
<b>APRIL</b>		
<b>3-Apr</b>	7.1	7-43 EOO, 53-65 EOO, 25, 77
<b>Tue</b>	7.2	1-61 EOO (X29), 32, 69, 72, 73
<b>5-Apr</b>	7.3	5-41 EOO, 57, 61, 64, 65
<b>Thr</b>	7.4	1-45 EOO, 42, 47, 49
<b>10-Apr</b>	7.6	1-61 EOO, 3, 5, 39, 55
<b>Tue</b>	7.7	1-33 EOO, 35
<b>12-Apr</b>	Review	Chapter 7 test in class next week
<b>Thr</b>		
<b>17-Apr</b>	Test	Test Chapter 7 in Class
<b>Tue</b>		
<b>19-Apr</b>	Final	
<b>Thr</b>	Review	
<b>24-Apr</b>	Final	
<b>Tue</b>	Review	
<b>26-Apr</b>	Final	
<b>Thr</b>	Review	
<b>1-May</b>	Final	Here in Class 7:30
<b>Tue</b>		