

DIXIE STATE COLLEGE - - Fall 2015
MATHEMATICS DEPARTMENT

Course Number: MATH 1080**Section Number:** 1**Room Number:** SNOW 147**Instructor:** Ross Decker (decker@dixie.edu)**Phone Number:** 862-0688**Course Title:** Precalculus with Trigonometry**Meeting Time:** M,T,W,R,F 10:00 – 10:50

Aug 24 to Dec 14

Office Room Number: SNOW 142**Office Hours:** 11 to 12 daily, or by appointment**Text:** PRECALCULUS Concepts Through Functions (3rd Edition) **Author:** Michael Sullivan, Michael Sullivan III**Prerequisites:** C or better in **MATH 1050** or ACT Math score of 25 or higher.

Exam dates and points possible are as follows:

Exam 1	September 2-6	100 points
Exam 2	September 11-15	100 points
Exam 3/4	September 28-30	100 points
Exam 5	October 7-11	100 points
Exam 6	October 22-26	100 points
Exam 7/8	November 10-12	100 points
Exam 9	November 18-22	100 points
Exam 10/11	December 8-10	100 points
Quizzes	Oct 1-2, Nov 5-6	40 points
Final Exam	Dec 14 (10:30 – 12:30)	200 points
Homework	(5 points each)	<u>315 points</u>
TOTAL POINTS:		1355 points

ATTENDANCE: Any student who misses the first two days of class will be dropped from the class.**DISHONESTY:** If it is determined that you cheated, you will receive a zero for that exam.

If cheating occurs a second time, you will receive an F for the course.

DISABILITIES: If you are a student with a medical, psychological, or learning disability, and would like accommodations or think you might have a disability, contact the Disability Resource Center (652-7516) in the Student Services Center, Room 201. The Disability Resource Center will determine eligibility based on your professional documentation and determine the appropriate accommodations related to your disability.**DISCRIMINATION:** DSU seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of sexual harassment/misconduct/assault, we encourage you to report this to the college's Title IX Director: Cindy Cole 652-7731, cindy.cole@dixie.edu. If you report to a faculty member, she or he must notify the Title IX Director about the basic facts of the incident.**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%)**GENERAL REMARKS:** It is the responsibility of each student to make time each day to read the text, attempt all homework problems, study for exams, and get extra help. Your work should be neat and easily read. Problems will be graded more for the work shown than for the final answer. Assignments should be considered a minimum and many students should work additional problems to reach mastery.

Course schedules, assignments, and exam dates are subject to change as circumstances dictate.

COURSE OBJECTIVES

All mathematics classes at Dixie State College will:

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

Upon successful completion of MATH 1065, a student will demonstrate through testing, the ability to:

- 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.
- Manipulate and evaluate trigonometric functions.
- Use proofs working with the trigonometric functions to prove trigonometric identities.
- Demonstrate the ability to use trigonometric identities to solve real world applications.
- Use vectors geometrically and algebraically to solve problems.

MON	TUE	WED	THUR	FRI	F.1 1-53 eoo
8/24 F.1, F.2	8/25 F.3, F.4	8/26 1.1	8/27 1.2	8/28 1.3, 1.4	F.2 1-65 eoo F.3 1-93 eoo
8/31 1.5	9/1 1.7	9/2 Ch 1 Review	9/3 2.1, 2.3	9/4 2.4	F.4 13-41eoo, 19 1.1 17-85 eoo
9/7 Labor Day	9/8 2.5,2.6	9/9 2.7	9/10 2.8	9/11 Ch 2 Review	1.2 1-8, 9-27o 1.3 13-69eoo
9/14 3.1,3.4	9/15 3.5	9/16 3.6	9/17 4.1,4.2	9/18 4.3	1.4 9-16, 25-37o 1.5 7-18, 39-67eoo
9/21 4.4	9/22 4.5	9/23 4.6	9/24 4.7	9/25 4.8	1.7 3-39eoo 2.1 13-49eoo
9/28 Review 3,4	9/29 5.1	9/30 5.2	10/1 5.3	10/2 Quiz	2.3 13-93eoo 2.4 19-55eoo
10/5 5.4	10/6 5.5	10/7 Ch 5 Review	10/8 6.1	10/9 6.2	2.5 3-21o 2.6 3-17o
10/12 6.3	10/13 6.4	10/14 6.4(cont.)	10/15 F A L L	10/16 B R E A K	2.7 9-33eoo 2.8 17-61eoo
10/19 6.5	10/20 6.6	10/21 6.7	10/22 Ch 6 Review	10/23 Exam 6	3.1 15.25o, 41-101eoo 3.4 13-23o, 43-53o
10/26 7.1	10/27 7.2	10/28 7.3	10/29 7.4	10/30 8.1	3.5 7-43eoo 3.6 19-47o
11/2 8.2	11/3 8.3	11/4 8.4	11/5 8.5	11/6 Quiz	4.1 11-59eoo 4.2 11-79eoo
11/9 8.7	11/10 Ch 7/8 Review	11/11 9.2	11/12 9.3	11/13 9.4	4.3 33-81eoo 4.4 9-53eoo
11/16 9.6	11/17 9.7	11/18 Ch 9 Review	11/19 10.1	11/20 10.3	4.5 13-89eoo 4.6 5-65eoo
11/23 10.5	11/24 10.6	11/25 T H A N K S G I V I N G		11/27	4.7 9-49eoo 4.8 1-13
11/30 10.7	12/1 11.1	12/2 11.2	12/3 11.3	12/4 11.5	5.1 1-29eoo, 39, 41-93eoo 5.2 13-93eoo
12/7 11.5(cont.)	12/8 Ch 10/11 Review	12/9 Review for Final	12/10 Review for Final	12/11 Review for Final	5.3 11-87eoo 5.4 21-57eoo
12/14 Final Exam 10:30 – 12:30					5.5 1-11o, 31-35, 39-41, 45 6.1 7-51eoo
6.2 9-77eoo	7.3 9-45eoo, 47		9.2 11-18, 19-71eoo	10.5 5-45eoo	
6.3 11-79eoo	7.4 5-21eoo		9.3 13-16, 17-69eoo, 71	10.6 5-41eoo	
6.4 19-87eoo	8.1 9-81eoo		9.4 15-18, 19-59eoo	10.7 11-51eoo, 53	
6.5 23-67eoo	8.2 13-27o, 39-59eoo		9.6 7-35eoo	11.1 9-77eoo	
6.6 7-27o	8.3 11-59eoo		9.7 7-25o	11.2 15-59eoo	
6.7 1-13eoo, 17-39o	8.4 9-69eoo, 73,75,77,81,89		10.1 11-71eoo	11.3 19-67eoo, 88, 90	
7.1 9-57eoo	8.5 7-25o		10.3 7-14, 15, 17, 33	11.5 5-41eoo	
7.2 9-41eoo	8.7 23-47eoo				

Testing Center Hours

Monday - Friday
9 AM to 10 PM

Saturday
2 PM to 10 PM

Sunday
4 PM to 10 PM