Dixie State University
http://www.dixie.edu
Syllabus for College Algebra/Pre-Calculus (4.0 credits)
CRN 20991 Math 1050-82J Spring 2020

This course fulfills the General Education Mathematics requirement for students majoring in Business, Elementary Education, Health Sciences, Science, and other majors.

Instructor: Shelly Thomas
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Date Range: January 6, 2020 – April 30, 2020

Classroom: 210
Class time: 9:38 - 11:04 B Day

Course Objectives:
All classes in mathematics at Dixie College support the general education goal of the college. Each class will:
1. Employ mathematical techniques in computational problems.
2. Students will interpret mathematical models.
3. Construct quantitative, logical arguments.
4. Students will apply mathematical knowledge to real world problems.
5. Communicate in the mathematical language through the use of proper notation and terminology.
6. Students will explore and analyze mathematical concepts, using technology as appropriate.
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

Catalog Description: Fulfills General Education Mathematics requirement for students majoring in Business, Elementary Education, Health Sciences, Science, and other majors. Reviews fundamental algebra; explores polynomial and rational functions; introduces exponential and logarithmic functions and applications; dealing with graphs, identities, and equations, including inverse functions. Required for Utah Level 2 and Level 3 Math Endorsements. Satisfies prerequisites for MATH 1060, MATH 1100, MATH 1210 (also needs MATH 1060), and MATH 2010, and Mathematics prerequisite for BIOL 3150, and CHEM 1210.

Class Structure: This section will have an extensive computer-based component. This means all homework, reviews, and tests will be done, checked and submitted to the instructor through a computer program called ALEKS.. _You will need access to a computer with internet for daily assignments._ Computer labs on campus are available to those students who do not have internet access.

Prerequisite: C average or better in Math I, II, and III AND a 23 or better on the Math portion of the ACT; OR C or better in Math 1010
Homework: Assignments are to be completed in ALEKS. Due dates are also posted in ALEKS. _The lowest two scores will be dropped. Homework scores cannot be improved after the due date. You can still review objectives but cannot improve your score._

Tests: Five Practice Tests and two Mid-term Tests will be given. _All_ Tests must be taken in the Testing Center. _You may take each practice Test only once. The lowest Practice Test will be dropped. Each Mid-term Test has a built in second attempt, or "quick retake", where you can retry only the problems that you missed on your first attempt. This quick retake must be completed within the given testing window. The lowest Mid-term Test can be replaced with the Final Exam score._ Students are expected to take all tests as scheduled in the syllabus. Make-up Tests will NOT be given except in documented emergencies, such as death in the immediate family, hospitalization (documentation

required), active military duty, DSU-sponsored-events requiring mandatory attendance (proof of attendance required). You must notify your instructor immediately in the case of an emergency for consideration and get prior consent if not an emergency.

Final Exam: The comprehensive Final Exam worth 20% of your overall course grade must be taken between April 24-30. You may take the comprehensive Final Exam only once. There is no quick retake on the final exam. You may not access any other websites or wear headphones while taking your final exam.

Attendance: Attendance is essential and may be counted into your grade. Students who have acceptable attendance may receive up to 10% extra credit added to an exam – awarded at the discretion of the instructor.

Calculators: A built-in calculator in ALEKS is provided but non-graphing scientific calculators only are allowed.

Grading Policy: Homework 30%, Practice Tests 30%, Tests and Final Exam 40%. Letter grades will be assigned as follows:

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

Respect for Others: Please plan to arrive on time and be prepared to work (i.e., have your pencil, eraser, book, paper, homework, and calculator). Additionally, please feel free to offer your opinions and questions to the class, but do not carry on side discussions. Cell phones should be turned off during class and please refrain from text messaging. In general, students may not engage in an activity which the instructor deems disruptive or counter-productive to the goals of the class. Instructors have the responsibility to remove offending students from the class. Repetition of offensive behavior may result in expulsion from the class.

Dishonesty: Dishonesty will not be tolerated in any form. Any student cheating on a test will receive a zero. Cheating behavior can include, but is not limited to, opening another window during an exam, checking your phone or tablet during an exam, and giving or receiving information about an exam. Instructors are required by college policy, to report dishonesty to the department chair.

Disability Resource Center (DRC): 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 North Plaza. The Disability Resource Center (http://dixie.edu/drcenter/) will determine eligibility of the student requesting special services and determine the appropriate accommodations related to their disability.

Withdrawing from or dropping a class: If you never attend a class, the instructor may withdraw you from it. If you attend even one day, the instructor cannot withdraw you from the class. Since not all instructors will withdraw you for non-attendance, you should take care of that transaction for yourself by going to the registration window. If you quit attending and do not withdraw from the class, you will receive an F. You must work with your counselor to withdraw or drop a class.

Changing your schedule: It is your responsibility, as the student, to ensure the accuracy of your class schedule. Be sure to check at the beginning of the semester and after every change you make to your schedule. Run a hard copy and keep it!

Complete Withdrawal: Dropping all classes by phone or online does not withdraw you from the college and you may receive all F's. You must contact your counselor, complete a withdrawal form, and surrender your student ID card

Changes: Although unlikely, this syllabus and/or the assignment schedule may be changed if deemed necessary by the instructor. All changes will be announced in class and/or sent to you via Canvas.

January 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6 1.1 (Classes Begin)	7	8 1.2	9	10 1.3 Practice Test 1	11 Practice Test 1
12 Practice Test 1 **1.1-1.3 Due**	13 1.4 & 1.5 Practice Test 1	14 Practice Test 1	15 1.6 Practice Test 1	16	17 1.7	18
19 **1.4-1.7 Due**	20 2.1	21	22 2.2	23	24 2.3 Practice Test 2	25 Practice Test 2
26 Practice Test 2 **2.1-2.3 Due**	27 2.4 & 2.4 Practice Test 2 (Last day to drop without a W)	28 Practice Test 2	29 2.6 Practice Test 2	30	31 2.7	

February 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2 **2.4-2.7 Due**	3 Review for Test 1 Test 1	4 Test 1	5 Review for Test 1 Test 1	6 Test 1	7 Review for Test 1 Test 1	8 Test 1
9 Test 1 **Review for Test 1 Due**	10 2.8 Test 1	11 Test 1	12 3.1 & 3.2 Test 1	13	14 3.3	15
16 **2.8-3.3 Due**	17 3.4	18	19 3.5	20	21 3.6 & 3.7 Practice Test 3	22 Practice Test 3
23 Practice Test 3 **3.4-3.7 Due**	24 4.1 & 4.2 Practice Test 3 (Midterm Grades Due)	25 Practice Test 3	26 4.3 Practice Test 3	27	28 4.4 (Last day to drop with a W)	29

March 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 **4.1-4.4 Due**	2 4.5	3	4 4.6	5	6 5.1 Practice Test 4	7 Practice Test 4
8 Practice Test 4 **4.5-5.1 Due**	9 5.2 Practice Test 4	10 Practice Test 4	11 5.3 Practice Test 4	12	13 5.4 & 5.5	14
15 **5.2-5.5 Due**	16 Spring Break	17 Spring Break	18 Spring Break	19 Spring Break	20 Spring Break	21
22	23 Review for Test 2 Test 2	24 Test 2	25 Review for Test 2 Test 2	26 Test 2	27 Review for Test 2 Test 2	28 Test 2
29 Test 2 **Review for Test 2 Due** 5.2-5.5 Due	30 5.6 Test 2	31 Test 2				

April 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 6.1 Test 2	2	3 6.2 & 6.3	4
5 **5.6-6.3 Due**	6 6.4 & 6.5	7	8 7.1	9	10 7.3 Practice Test 5	11 Practice Test 5
12 Practice Test 5 **6.4-7.3 Due**	13 8.1 & 8.2 Practice Test 5	14 Practice Test 5	15 8.3 Practice Test 53	16	17 8.5	18
19 **8.1-8.5 Due**	20 Review for Final Exam	21	22 Review for Final Exam	23	24 Review for Final Exam Final Exam	25 Final Exam
26 Final Exam	27 Final Exam	28 Final Exam	29 Final Exam	30 Final Exam **Review for Final Exam Due**		