Dixie State University

http://www.dixie.edu

Syllabus for College Algebra/Pre-Calculus (4.0 credits)

CRN 47481 Math 1050-14H Fall 2015

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

Instructor: Gordon A. Russell
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Date Range: Aug. 24,2015 – Dec.11,2015

Classroom: Rm109H
Class time: 4:00 – 5:40 Tues.&Thur.
Office: Rm. 102H
Office Hours: 2:30 – 3:30

Course Objectives:

All classes in mathematics at Dixie College support the general education goal of the college. Each class 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 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; trigonometric functions 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. FA, SP, SU 4.000 Credit hrs 4.000 Lecture hrs

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 MyMathLab (MML). *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.

- **To register for MyMathLab (MML)**, go to http://www.mymathlab.com/ and
  - ✓ Under the heading "Register", click "Student".
  - ✓ When you are asked for the **COURSE ID** enter ***russell92906***
  - ✓ Follow the instructions to either create an account, or sign in if you have an existing account. If you are creating a new account, you will need to purchase a student **ACCESS CODE** from either the publisher as you are registering or ahead of time from the bookstore. Check both places to see which is less expensive.
  - ✓ When you enter your **email account**, please make sure you use the email that you check the most often.
  - ✓ If you have questions, please go to http://www.pearsonmylabandmastering.com/northamerica/students/get-registered/index.html and watch the video found by scrolling towards the bottom of the screen or you may contact customer support service (http://www.mymathlab.com/student-support).A 14-day free trial is available through the MML website.

Prerequisite: MATH 1000 or Math 1010 (Grade C or higher) within two years of enrollment in this course; OR ACT or equivalent placement score 23 or higher within two years of enrollment in this course; OR CPT score of 89 or higher within the last two years of enrollment in this course.
eTextbook and Other Expenses: Software based on: **College Algebra 11/e,** by Lial, Hornsby, Schneider, Daniels (not required) but you need to purchase an access code for MyMathLab (Cost approx. $95) A scientific calculator ($8-$20) is recommended; however, you may use the calculator in MyMathLab. Your instructor will be using the TI 30 XII S calculator.
Homework: Assignments are to be completed in MML. Due dates are also posted in MML.
- You must score a minimum of 70% on your homework sets in order to access the test.
- You get three attempts to get a problem correct. If after the third attempt you still have not gotten the problem correct, you may request a similar problem to be generated and graded by clicking on the "Similar Exercise" button at the bottom of the homework window. You are encouraged to repeat homework problems and obtain a perfect score before the due date.
- If you do not know how to solve a problem, you may select the "Help Me Solve This", "View an Example", or other help features in the right hand menu in the MML homework window.
- Your homework will be worth 20% of your overall course grade.
- It is very important that you keep current on the assignments.

Test Reviews: Test reviews are to be completed in MML. Due dates are also posted in MML.
- No minimum score is required on your test reviews in order to access the test associated with the reviews.
- You get three attempts to get a problem correct. If after the third attempt you still have not gotten the problem correct, you may request a similar problem to be generated and graded by clicking on the "Similar Exercise" button at the bottom of the homework window. You are encouraged to repeat review problems and obtain a perfect score before the due date.
- If you do not know how to solve a problem, you may select the "Help Me Solve This", "Textbook" or other help features in the right hand menu in the MML review window.
- Your test review scores will count as homework scores.
- You are highly encouraged to do the reviews to help you prepare for your tests.

Tests: Five tests will be given. Each test will be 12% of your overall course grade. **All tests must be taken in the Testing Center**. You may take each test only once. Students are expected to take the tests as scheduled in the syllabus. You may not access the test after the due date. Make-up exams will NOT be given except in documented emergencies, such as death in 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. The lowest test score (percentage) can be replaced with the final exam percentage. You may not access other websites or wear headphones while taking the midterm exams. Only non-graphing scientific calculators are allowed on tests.

Final Exam: The final comprehensive exam worth 20% of your overall course grade must be taken on **Tuesday Dec. 15 at 3:30-5:30** **You may take the final comprehensive exam only once**. You may not access any other websites or wear headphones while taking your final exam. Only non-graphing scientific calculators are allowed on midterm exams.
Attendance: Attendance is essential and may be counted into your grade.
Calculators: Only non-graphing scientific calculators are allowed on tests. Cell phones, iPads, Graphing Calculators, etc. may not be used as calculators on tests.

Grading Policy: Unit Tests 12% each; Homework/Test Reviews 20%; Final Exam 20%

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. Giving as well as receiving information is dishonest, so be aware of those around you while taking tests. http://www.dixie.edu/humanres/policy/sec3/334.html. Instructors are required, by college policy, to report dishonesty to the student conduct committee.
Policy for Absences Related to College Functions: http://www.dixie.edu/humanres/policy/sec5/523.html

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.
Library: A copy of the text and complete solutions manual for in-house use only are at the Reserve Desk in the Library. For more information concerning the library and hours of operation go to http://library.dixie.edu
Writing Center: The Writing Center is located on the fourth floor of the Holland Centennial Commons if you need assistance with a written assignment in any class. For more information go to http://dixie.edu/english/dsc_writing_center.php
Tutoring Center: The Tutoring Center is located on the fourth floor of the Holland Centennial Commons. Drop-in mathematics tutoring is available. More information is available at http://dsc.dixie.edu/tutoring/index.htm
Testing Center: http://dixie.edu/testing
Computer Lab: The Computer Lab is located in the Smith Computer Center. For more info go to http://dixie.edu/cit/cis/

Dmail: You are required to frequently check your Dmail account. Important class and university information will be sent to your Dmail account, including DSU bills, financial aid/scholarship notices, notices of cancelled classes, reminders of important dates and deadlines, and other information critical to your success at DSU and in your courses. To access your Dmail account, visit go.dixie.edu/dmail. If you do not know your Dmail username or you have forgotten your PIN, visit go.dixie.edu/mydixie and follow the respective instructions.

MyMathLab (MML): Please make sure you check your MML account frequently. Go to http://www.mymathlab.com/ to access MML.

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 or WF which averages into your GPA as an F.

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 the Advisement Center, 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 MML.

Important Dates: http://new.dixie.edu/reg/?page=fall2015

Final Exam Schedule

Fall 2015 Final Exam Schedule

Daytime Classes			
Class Type	Class Time	Exam Day	Exam Time
Daily, MWF, MTWF, MWRF, MW, etc.	7:00 a.m.	Mon, Dec 14	7:00 a.m.- 9:00a.m.
	8:00 a.m.	Wed, Dec 16	8:30 -10:30 a.m.
	9:00 a.m.	Fri, Dec 18	9:30 -11:30 a.m.
	10:00 a.m.	Mon, Dec 14	10:30 a.m. – 12:30 a.m.
	11:00 a.m.	Wed, Dec 16	11:00 a.m. – 1:00 p.m.
	12:00 p.m.	Fri, Dec 18	12:00 p.m. – 2:00 p.m.
	1:00 p.m.	Mon, Dec 14	1:00 p.m. – 3:00 p.m.
	2:00 p.m.	Wed, Dec 16	1:30 p.m. – 3:30 p.m.
	3:00 p.m.	Fri, Dec 18	2:30 p.m. – 4:30 p.m.
	4:00 p.m.	Mon, Dec 14	3:30 p.m. – 5:30 p.m.
Tue/Thur	7:30/8:00 a.m.	Tue, Dec 15	8:00 a.m. – 10:00 a.m.
	9:00 a.m.	Thu, Dec 17	9:30 a.m. – 11:30 a.m.
	10:30 a.m.	Tue, Dec 15	10:30 a.m. – 12:30 p.m.
	12:00 p.m.	Thu, Dec 17	12:00 p.m. – 2:00 p.m.
	1:00 p.m.	Tue, Dec 15	1:00 p.m. – 3:00 p.m.
	2:30 p.m.	Thu, Dec 17	2:30 p.m. – 4:30 p.m.
	4:00 p.m.	Tue, Dec 15	3:30 p.m. – 5:30 p.m.

Once a Week or Evening Classes
Classes which meet once a week and/ or in the evening (5:00 p.m. or later) hold Final Exams during the regularly scheduled class time during the Final Exam week.

Important dates to remember for Fall 2015:

Mon, Aug 17	Tuition and Fees Due, Courses Dropped for Non-Payment
Mon, Aug 24	Classes begin
Thurs, Aug 27	Last day for waitlist
Fri, Aug 28	Last day to add classes online
Tues, Sep 1	$50 Late registration/payment fee
Wed, Sep 2	Drop/Audit fee begins ($10 per class)
Wed, Sep 2	Residency Application deadline
Fri, Sep 4	End of 100% refund period
Mon, Sep 7	Labor Day (no classes)
Tues, Sep 8	Beginning of 50% refund period
Mon, Sep 14	Last day for refund
Mon, Sep 14	Pell Grant Census
Mon, Sep 14	Last day to drop without a "W" grade
Wed, Sep 17	Classes dropped for nonpayment
Fri, Sep 18	Last day to add/audit classes
Thurs, Oct 1	Fall 2015 Associates Degree Graduation Application deadline
Mon, Oct 5	*Block classes begin*
Wed, Oct 14	Midterm grades due
Thurs & Fri, Oct 15-16	Semester break
Mon, Oct 19	Last day to drop individual classes
Mon, Oct 26	Spring and Summer 2015 class schedules available online
Mon, Nov 2	Spring 2015 Bachelor's Degree Graduation Application deadline
Tue, Nov 11	Career Day (no classes before 4 pm)
Fri, Nov 13	Last day for complete withdrawal
Oct 16-19	Spring Registration Opens
Wed-Fri, Nov 25-27	Thanksgiving break (no classes)
Fri, Dec 11	Last day of classes
Mon-Fri, Dec 14-18	Final exams

Math 1050 – 14H

Course ID: russell92906

Recommended Schedule – Math 1050 College Algebra – Spring 2015					
Date	**Day**	**Assignment**	**Date**	**Day**	**Assignment**
Aug 25	Tues	Orientation	Oct 14	Wed	**Optional Day: Chapter 3 Test**
Aug 25	Tues	Sec. 1.1 Linear Equations	Oct 15	Thurs	Fall Break
Aug 27	Thurs	Sec. 1.2 Applications & Modeling with Linear Equations	Oct 16	Fri	Fall Break
Aug 27	Thurs	Sec. 1.3 Complex Numbers	Oct 19	Mon	
Sep 1	Tues	Sec. 1.4 Quadratic Equations	Oct 20	Tues	4.1 Inverse Functions/4.2 Exponential Functions
Sep 1	Tues	Sec. 1.5 Applications & Modeling with Quadratic Equations	Oct 22	Thurs	Sec. 4.3Log Functions / Sec. 4.4 Change of Base
Sep 3	Thurs	Sec. 1.6 Other Equation Types & Applications	Oct 22	Thurs	Sec. 4.5 Exp and Log equations
Sep 3	Thurs	Sec. 1.7 Inequalities	Oct 27	Tues	Sec. 4.6 Exp Growth and Decay
Sep 7	Mon	NO SCHOOL	Oct 27	Tues	Review/ **Chapter 4 Test**
Sep 8	Tues	Sec. 1.8 Absolute Value Equ & Inequ	Oct 28	Wed	Optional Day **Chapter 4 Test**
Sep 10	Thurs	Review/Chapter 1 Test	Oct 29	Thurs	Sec. 5.1 Systems of Linear Equa. Sec.5.3Determinants Optional Day: Chapter 4 Test
Sep 11	Fri	Optional Day Chapter 1 Test	Oct 30	Fri	Optional Day: Chapter 4 Test
Sep 15	Tues	Sec. 2.1 Rect. Coordinates & Graphs/	Nov 3	Tues	Sec. 5.4 Partial Fractions
Sep 15	Tues	Sec. 2.2 Circles			

Sep 17	Thurs	Sec. 2.3 Functions	Nov 5	Thurs	Sec. 5.5 Nonlinear Systems of Equations
Sep 17	Thurs	Sec. 2.4 Linear Functions	Nov 5	Thurs	Sec. 5.6 Systems of Inequalities and Linear Programing
Sep 22	Tues	Sec. 2.5 Equations of Lines & Linear Models	Nov10	Tues	Sec. 6.1 Parabolas
Sep 22	Tues	Sec. 2.6 Graphs of Basic Functions			
Sep 24	Thurs	Sec. 2.7 Graphing Techniques	Nov12	Thurs	Sec. 6.2 Ellipses
Sep 24	Thurs	Sec. 2.8 Function Operation & Composition			
			Nov17	Tues	Review/ **Chapter 5-6 Test**
Sep 29	Tues	Review/ Chapter 2 Test	Nov.18	Wed.	OptionalTest Day Ch. 5-6 Test
Sep 30	Wed	Optional 3rd Day: Ch. 2 Test	Nov19	Thurs	Sec. 7.1 Sequences & Series/ **Optional Day: Chapter 5/6 Test**
Oct 1	Thurs	3.1 Quadratic Functions 3.2 Synthetic Division/ Optional Day: Chp 2 Test	Nov20-23	Fri-	**Optional Day: Chapter 5/6 Test**
Oct 2	Fri	Optional Day: Chp 2 Test			
			Nov24	Tues	Sec. 7.2 Arithmetic Sequences Sec. 7.3 Geometric Sequences
			Nov25-27	Wed-Fri	NO SCHOOL, Thanksgiving
Oct 6	Tues	Sec. 3.3 Polynomial Function Zeros/			
Oct 6	Tues	Sec. 3.4 Polynomials: Graphs, Applications, and Models	Dec1	Tues	Sec. 7.4 The Binomial Theorem
Oct 8	Thurs	Sec. 3.5 Rational Functions: Graphs, Applications, and Models			
Oct 8	Thurs	3.6 Variation	Dec3	Thurs	Sec. 7.6 Counting Theory
			Dec7-10	Mon-Thurs	Final Review
Oct 13	Tues	Review/ Chapter 3 Test	Dec. 15	Tues.	Final Exam: 3:30 – 5:30