MATH 1050 College Algebra, Fall 2017

Class Meetings: T, H at 6:00 - 8:00 p.m. in JFB 103
Instructor: Leonard Carapezza
Email: carapezz@math.utah.edu (note: is 'carapezz' and not 'carapezza')
Office Hours: T, H at 4:00 - 5:00 in JWB 326.
Text: *PRECALCULUS*, 9th Edition, 2013 Larson.
The University of Utah has negotiated special pricing for the text and Webassign; for $75 you may purchase the online version of the text with Enhanced Webassign. This price covers both 1050 and 1060.
OPTION: If you would like, you may also purchase a loose-leaf version of the text for $40. The text may be purchased at: www.cengagebrain.com/course/2233827.

Course Information: Math 1050 College Algebra is a four credit course and satisfies the Quantitative Reasoning requirement.
Prerequisite Information: "C" or better in (MATH 1010 OR MATH 1060 OR MATH 1080 OR MATH 1090) OR Accuplacer CLM score of 60 or better OR ACT Math score of 23 or better OR SAT Math score of 570 or better.
Course Description: Functions, inverses and graphs; polynomial, rational, radical, exponential and logarithmic functions; systems of equations and matrices; applications; arithmetic and geometric sequences and series.

Canvas: On the canvas page will be posted course announcements, a link to Webassign, grades, files and relevant supplementary material. You are welcome to make use of the Canvas discussion board to discuss course problems or topics. You can access the Canvas page through CIS or by logging in at utah.instructure.com. Students should check the Canvas page regularly for course information and resources.
Correspondance: Email notifications and correspondence will be sent to the student's UMail address ([u-number]@utah.edu); this email account should be checked regularly.

Grading: The following are the grade components and the percentage each contributes to a student's final grade:

- **Homework Assignments (15%)** - All homework is to be completed on Webassign. Due dates for homework assignments may be found on Webassign. Late homework will not be accepted.
  Note that on Webassign there is no limit to the number of answers you may submit to each prompt.

- **Quizzes (7%)** - A typical Thursday class will conclude with a brief quiz on the present week's content. There will be twenty minutes of class time allotted for each quiz. Your lowest three quiz scores will be dropped.

- **Midterm Exams (54%, 18% each)** - There will be three midterm exams:

  - Midterm 1 : Thursday, September 21
  - Midterm 2 : Thursday, October 26
  - Midterm 3 : Thursday, November 30

- **Final Exam (24%)**- A two-hour comprehensive exam will be given, scheduled for Tuesday, December 12, from 6:00 - 8:00 p.m. in JFB 103.

Final course letter grades will be determined from percentages as follows:

Percentage	Grade
$93 \le \% \le 100$	A
$90 \le \% < 93$	A-
$88 \le \% < 90$	B+
$83 \le \% < 88$	B
$80 \le \% < 83$	B-
$78 \le \% < 80$	C+
$73 \le \% < 78$	C
$70 \le \% < 73$	C-
$68 \le \% < 70$	D+
$63 \le \% < 68$	D
$60 \le \% < 63$	D-
$0 \le \% < 60$	E

Calculators: Use of calculators will not be allowed on exams, though they may be used on homework. It is in your interest to not become dependent on your calculator since its use will not be allowed on exams.

Attendence: Attendence will not be considered when your grade for the course is computed. You are encouraged to attend class as often as possible.

Missed Quizzes and Exams: If you will be unable to attend class on the day of a quiz or exam, please let me know at your earliest convenience so that we may arrange an alternate time. If you miss a quiz or exam you will not be able to make it up unless this has been arranged in advance, excepting extreme circumstances.

Expected Learning Outcomes: Upon successful completion of this course a student should be able to:

1. Sketch the graph of polynomial, rational, radical, exponential, logarithmic, and piecewise functions, with or without transformations. Identify important points on the graph of a funciton such as x or y intercepts and maximum or minimum values. Identify domain, range and any symmetry of above mentioned functions.

2. For rational functions, identify horizontal and oblique asymptotes (end behavior). Use intercepts and asymptotes to sketch graphs of rational functions.

3. Identify zeros (real and complex), factors, end behavior and positivity/negativity of polynomial functions; use this information to sketch graph a graph.

4. Understand relationships between graphic, algebraic, and verbal descriptions of functions.

5. Identify domain, range, asymptotes, symmetry and intercepts from the graph of a function. Find a rule for the graph of a function if it is obtained from a standard function through transformations.

6. Define i as the square root of -1 and know the complex arithmetic necessary for solving quadratic equations with complex roots.

7. Solve absolute value, linear, polynomial, rational, radical, exponential and logarithmic equations and inequalities.

8. Find the inverse of a function algebraically and graphically.

9. Perform composition of functions and operations on functions.

10. Understand sequences and be able to differentiate between geometric, arithmetic and others such as Fibonacci-type sequences, giving direct formulas where available or a numeric representation.

11. Understand series notation and know how to compute sums of finite arithmetic and finite and infinite geometric series.

12. Solve 3×3 systems of linear equations as well as systemos of non-linear equations in two variables.

13. Make sense of algebraic expressions and explain relationships among algebraic quantities including quadratic, exponential, logarithmic, rational, radical, and polynomial expressions, equations and functions.

14. Represent and interpret real world situations using quadratic, exponential, logarithmic, rational, radical, and polynomial expressions, equations, and functions.

Additional Resources

- **Tutoring Center & Computer Lab**- There is free tutoring in the T. Benny Rushing Mathematics Student Center (room 155, the lower level between JWB and LCB), as well as a computer lab. For more information see http://www.math.utah.edu/ugrad/tutoring.html

- **Private Tutoring**- University Tutoring Services, 330 SSB. There is also a list of tutors at the math department office JWB 233.

- **Departmental Videos**- The math department has a full set of lecture videos which you are welcome to use to supplement our course material. These can be found at http://www.math.utah.edu/lectures/

Student Responsibilities: All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, and I will do so, beginning with verbal warnings and progressing to dismissal from and class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee. http://regulations.utah.edu/academics/6-400.php

ADA Statement: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability & Access, 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability & Access.

Addressing Sexual Misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veterans status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

Student Names and Personal Pronouns: Class rosters are provided to the instructor with the students legal name as well as preferred first name (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected. If you need assistance getting your preferred name

on your UIDcard, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

Wellness Statement: Personal concerns such as stress, anxiety, relationship difficulties, depression, cross - cultural differences, etc., can interfere with a students ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801 - 581 - 7776.

Relevant Dates:

- **Friday, September 1:**   Tuition Due, Last day to drop class.

- **Monday, September 4:**   Labor Day.

- **Thursday, September 21:**   Midterm 1.

- **Sunday - Sunday, October 8-15:**   Fall Break

- **Friday, October 20:**   Last day to withdraw from class.

- **Thursday, October 26:**   Midterm 2.

- **Thursday - Sunday, November 23 - 26:**   Thanksgiving Break.

- **Thursday, November 30:**   Midterm 3

- **Thursday, December 7:**   Last day of class.

- **Tuesday December 12:**   Final exam.