# MTH 111-College Algebra Spring 2020

# Instructor Information

Instructor: Juli Schutfort

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Office Hours: Tu, Th & Sat. 3-4 pm via Zoom https://linnbenton.zoom.us/j/4387657408

#### **Course Information**

CRN: 40273

Prerequisite: MTH 95 or equivalent

Topics covered will include relations and functions; including linear, quadratic, polynomial, rational, exponential and logarithmic functions. Functions and solving of equations will be emphasized. Use of matrices to solve systems will be introduced.

#### **Course Outcomes:**

1. Interpret graphical information, such as identifying types of functions, translations, inverses, intercepts, and asymptotes.

2. Solve a variety of symbolic equations and inequalities, such as rational, absolute value, exponential, radical, logarithmic, and linear systems.

3. Construct appropriate models for real world problems, such as fitting an algebraic function model to a set of data, and system of linear equations.

# Materials:

Regular access to a computer and the Internet Graphing Calculator, TI83 or TI84 preferred We will be using an open source textbook and software

#### **Resources:**

The Math Desk will be operating Spring Term to support students working remotely. We're operating remotely via Zoom, with drop-in help available during our standard hours:

- 8am 9pm Mon Thu
- 8am 5pm Fri
- 11am 4pm Sat

The link to the remote Math Desk is <u>https://linnbenton.zoom.us/j/579890953</u> The URL for the Learning Center Remote Resources site

is <u>https://www.linnbenton.edu/current-students/study/learning-center/hours-and-</u> <u>locations/index.php</u>. This will have all relevant Zoom meeting links, hours, and updated information for students who want to use any of the Learning Center resources.

## How your Progress will be Measured

**Homework**: Success in a math class goes hand-in-hand with completing the homework assignments. When doing your homework, feel free to ask for help. The Math Lab personnel are here to help you; get in the habit of doing your homework during drop-in help hours. Form a study group with other members of the class. Talking with others about math is where learning begins!

Homework will be completed and submitted electronically using MyOpenMath.

# Enrolling in the Class Software: MyOpenMath

1 Go to www.myopenmath.com

- 2 Click on "Register as a New Student"
- 3 Enter a user name, I recommend using your student ID number
- 4 Choose and confirm a password, one you will not forget
- 5 Enter your first and last names, and your e-mail address
- 6 Enter the Course ID: 69581
- 7 Enter the Enrollment Key: mth111

Homework for the week will be due on Sunday at 11:59pm. You will have 3 late passes that you can use on HW assignments. You must apply the late pass before the due date of the assignment. The late pass will extend the due date by 4 days without penalty. You will get 3 attempts per problem in a HW assignment. Your two lowest HW scores will be dropped from the grade calculation.

Activities: There are weekly Activities (1 or 2 per week) that you will be discussing in groups in Moodle and submitting individually. The submission date is usually on Saturday even if there are two Activities that week. Solutions to the Activities will be posted after the due date. Late Activities are not accepted. The lowest activity score will be dropped.

**Participation:** You will receive participation points for posting to the weekly Activity Group discussion forum.

**Tests:** There will be two tests and a comprehensive final in this course. Testing will be done in myopenmath and will be available for a 24 hour period. There are no retests. If you must miss a test you are required to contact the Instructor <u>prior</u> to the testing time. If you fail to take a test, you will receive a score of 0.

- The time limit for test 1 and test 2 is 90 minutes. The limit for the final exam is 110 minutes.
- The exams may randomly generate questions of different types so each student's version may be slightly different but cover the same concepts.
- The tests are not proctored.
- The exams are open books and notes.
- Test dates are on the class schedule and the MyOpenMath website.

Grading: Grades will be based on	
2 Tests (15% each)	30%
Cumulative Final	15%
Activities	15%
Participation	5%
MyOpenMath Homework	35%

Final Grade: A: 90 - 100%B: 80 - 89%C: 70 - 79%D: 60 - 69%F: 0 - 59%(The grades of Y and WP are not given in this class. The grade of IN is only given under unusual and verifiable conditions, and if the majority of the work has been completed.

## Other

LBCC maintains a policy of nondiscrimination and equal opportunity in employment and admissions, without regard to race, color, sex, marital and/or parental status, religion, national origin, age, mental or physical disability, Vietnam era, or veteran status.

Students who may need accommodations due to documented disabilities, or who have medical information which the instructor should know, or who need special arrangements in an emergency, should speak with the instructor during the first week of class. If you think you may need accommodation services, please contact Center for Accessibility Resources, 917-4789.

Acts of academic dishonesty are regarded by the college as very serious offenses. Penalties will be the maximum permitted by the college.

Week	Topic	Assignments
1	Sec 3.1: Functions & Function Notation	HW/3132&33
	Sec 3.2: Domain & Range	Weekly Discussion
1/6	Sec 3.2: Domain & Nange	Activity 1
4/0	Set S.S. Rate of Change	Activity 1
2	Sec 3.4: Composition of Functions	HW 3.4, 3.5 & 3.6
	Sec 3.5: Transformations	Weekly Discussion
4/13	Sec 3.6: Absolute Values	Activity 2 & 3
3	Sec 3.7: Inverses	HW 3.7, 4.1 & 4.2
	Sec 4.1: Linear Functions	Weekly Discussion
4/20	Sec 4.2: Modeling with Linear Function	Activity 4 & 5
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4	Tost 1 Open Tuesday 12am 11,50nm	
•	<b>Test 1</b> – Open Tuesday 12am – 11:59pm	HW/51&52
1/27	Sec 5.1: Quadratic Functions	Weekly Discussion
4/2/	Sec 5.2: Power & Polynomial Functions	Activity C
		Activity 6
5		
	Sec 5.3: Graphs of Polynomial Functions	HW 5.3, 5.6 & 5.7
5/4	Sec 5.6: Rational Functions	Weekly Discussion
	Sec 5.7: Inverses and Radical Functions	Activity 7 & 8
6		
•	Sec 5.8: Modeling Using Variation	HW 5.8.6.1 & 6.2
5/11	Sec 6.1: Exponential Functions	Weekly Discussion
5/11	Sec 6.2: Graphs of Exponential Functions	Activity 9 & 10
	See 0.2. Graphs of Exponential runctions	Activity 5 & 10
7		
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5/40	<b>Test 2</b> – Open Tuesday 12am – 11:59pm	
5/18	Sec 6.3: Logarithmic Functions	Weekly Discussion
	Sec 6.4. Graphs of Log Functions	Activity 11
8		
	Sec 6 5: Logarithmic Properties	HW 65 668 67
F /2F	Sec 0.5. Logantining Properties	
5/25	Sec 6.6: Exponential and Log Equations	
	Sec 6.7: Exp & Log Models	Activity 12 & 13
9		_
	Sec 11.1: System of Equations : Two Variables	HW 11.1, 11.2 & 11.6
6/1	Sec 11.2: System of Equations : Three Variables	Weekly Discussion
	Sec 11.6 Solving Systems with Gaussian Elimination	Activity 14 & 15
10		1
6/8	Review	
5,5	Final Exam Open Thursday 12am to 11.50nm	
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Tentative Schedule—Any changes will be made in MyOpenMath