

# MTH 111-College Algebra

## Winter 2020

### Instructor Information

Instructor: Juli Schutfort

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Office: BC101

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Office Hours: Tu & Th 6-6:30 pm

### Course Information

CRN: 30192

Prerequisite: MTH 95 or equivalent

Classroom: BC 234

Time: Tuesday & Thursday: 6:30-8:50pm

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

**Drop-In Math Help, BC 232 (Learning Annex) M-Th 12pm to 7pm**

Do you want to be successful in this class? I want you to be successful! Here are some tips:

1. Come to class, have your class materials with you and be mentally present and engaged. Turn off your cell phone and be respectful of your class mates.
2. Stay caught up with your homework. Algebra is a very sequentially topic and you really need to have Tuesday's homework done to be able to understand what we do on Thursday!

## How your Progress will be Measured

**Tests:** There will be two tests and a comprehensive final in this course. Testing will be done in class (This means there will be a time limit!) There are no retests. If you must miss a test you are required to contact the Instructor prior to the testing time. If you fail to take a test, you will receive a score of 0.

- Each test and the final exam is 110 minutes.
- You can use a 3"x5" double-sided notecard and graphing calculator on all exams.
- Test dates are on the class schedule and the myOpenMath website.
- It is your responsibility to know the exam schedule and be present on time on exam days. If you miss an exam you will receive a "0". That grade may be changed by your final exam grade as mentioned above. There are no retests or make-ups. Exceptions to this policy may be made for extremely unusual circumstances. You should contact me prior to the exam period in such cases.
- **Final Exam Date:** Tuesday, March 17<sup>th</sup> 6:30pm to 8:20pm.

**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](http://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:

7 Enter the Enrollment Key:

**In-Class Activities:** In-class activities are started and finished in class. These are group structured activities that help you understand the material by doing rather than always by listening. You may submit one activity per group. Activities are due at the end of the class period. Late activities are not accepted. The lowest two activity scores will be dropped. No make-up activities.

**Grading:** Grades will be based on

2 Tests (15% each)	30%
Final	20%
In-Class Activities	20%
MyOpenMath Homework	30%

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.

**Tentative Schedule—Any changes will be made in MyOpenMath**

	Tuesday	Thursday
1	Intro Sec 3.1: Functions & Function Notation ICA 1	Sec 3.2: Domain & Range Sec 3.3: Rate of Change  ICA 2
2	Sec 3.4: Composition of Functions Sec 3.5: Transformations  ICA 3	Sec 3.6: Absolute Values Sec 3.7: Inverses  ICA 4
3	Sec 4.1: Linear Functions Sec 22 Graphs of Linear Functions  ICA 5	Sec 4.2: Modeling Sec 4.3: Fitting Linear Models  ICA 6
4	<b>Test 1</b>	Sec 5.1: Quadratic Functions Sec 5.2: Power & Polynomial Functions ICA 7
5	Sec 5.3: Graphs of Polynomial Functions  ICA 8	Sec 5.5: Zeros of Polynomial Functions Sec 5.6: Rational Functions  ICA 9
6	Sec 5.7: Inverses and Radical Functions Sec 5.8: Modeling Using Variation  ICA 10	Sec 6.1: Exp Functions Sec 6.2: Graphs of Exp Functions  ICA 11
7	Sec 6.3: Logarithmic Functions Sec 6.4: Graphs of Log Functions  ICA 12	Sec 6.5: Logarithmic Properties Sec 6.6: Exponential and Log Equations  ICA 13
8	Sec 6.7: Exp & Log Models Sec 6.8 Fitting Exp Models  ICA 14	<b>Test 2</b>
9	Sec 11.1: System of Equations : Two Variables Sec 11.2: System of Equations : Three Variables  ICA 15	Sec 11.5: Matrices Sec 11.6 Solving Systems with Gaussian Elimination  ICA 16
10	Sec 11.7: Inverses ICA 17	Review - Catchup

**Final Exam Tuesday March 17<sup>th</sup>, 6:30 – 8:20pm**