

Math 111 - College Algebra Online - 40780
Spring 2019

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Office Hours: T 10 am, R 11 am

Course Materials:

- Aleks 360 account. Enter through [Moodle](#), find ALEKS at the bottom of the page.
- Calculator with graphing capabilities. Rental calculators are available in Albany, Corvallis, and Lebanon for \$25 per term. Check with the bookstore at that campus for more complete rental information. You will need to be comfortable using the graphing capabilities on a calculator. All tests will be taken using a calculator.
- Regular access to the internet and to e-mail. I expect you to be using ALEKS, Moodle and e-mail nearly every day.
- Notebook for taking notes with ALEKS and recording work.

Course Description:

This course explores relations and linear, quadratic, exponential, polynomial, rational and logarithmic functions. Includes theory of equations, matrices and determinants.

Prerequisite: C or better in MTH 95, Intermediate Algebra, or equivalent.

Math 111 Outcomes: Upon completion of the course, the student will be able to:

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.

Grading Policy: The student's grade in this class is based on the following:

ALEKS HW

<i>Objectives and Topics</i>	26%	35%
<i>Knowledge Checks</i>	4%	
<i>Whole Pie</i>	5%	
3 Tests (15% each)		45%
Final Exam		20%

Grades will be assigned as outlined in the scale below:

A : 90-100% B : 80-89% C : 70-79% D : 60-69% F : 0-59%

Course Design:

This course is divided into 4 modules. Modules 1-3 will each be followed by an exam covering that module. At the end of the course students will take a cumulative Final that includes material from all four modules.

1. Module 1 Functions, Linear Models and Equations
2. Module 2 Quadratic, Polynomial and Rational Functions and Equations
3. Module 3 Exponential and Logarithmic Functions and Equations
4. Module 4 Systems and Matrices

Learning the Material and ALEKS:

The course homework and most of the course learning will be done in an online adaptive learning environment called ALEKS. Watch this [video introduction](#) before reading on.

You will start with an initial knowledge check that assesses what you already know and what you still need to learn. ALEKS then determines a unique lesson plan for you to learn the material of the course. Note: ALEKS tailors its lesson path to your understanding of the course material. You will have more or less work to do in ALEKS to learn the course material, depending on how much of the course material you still need to learn.

Every course topic has a lesson from the associated book, College Algebra by Julie Miller and Donna Gerken. You can access an ebook in ALEKS so you don't have to purchase a hard copy unless you want to. Many of the topics also have videos to help you learn the material.

You must be prepared to spend at least 10-15 hours per week on this class, many of those hours working in ALEKS. The first week you must spend at least 10 hours in ALEKS or you will be dropped from the course. Note that since this is a 5 credit math class, if you were in a classroom, you would spend 5 hours in class, and 2 hours outside of class for each hour in class, for a total of 15 hours. You will want to be working in ALEKS daily to complete each weeks' objectives so you don't have to spend all day on the assignment due date.

Homework Objectives and Topics

Homework is completed online in ALEKS. The ALEKS pie shows you how much of the course material you have already mastered, learned, and still need to learn. Your homework grade for each objective will be the percent of that objective pie you have completed. Homework deadlines are on Wednesdays and Saturdays at 11:59pm.

Your lesson path in ALEKS includes topics that are pre-requisites to current course content. This allows you to fill in gaps in your background knowledge that are essential for you to be able to learn the new material and avoid being stuck and frustrated. You might have to spend time in ALEKS learning these pre-requisites before the content you are learning fills in more of your pie. **These will NOT count for your Objective goals and will NOT count towards your homework grade.** Note that ALEKS will also randomly assess your understanding of topics you have already learned with a knowledge check to see if you still understand it or if it needs to be added back in to your learning path.

Tip: ALEKS' goal is that you understand the course objectives, NOT that you do 20 exercises for that section. (Your workload depends on how efficiently you learn, understand and demonstrate the math.) Recognizing this can help you navigate ALEKS successfully and with less frustration.

Writing up Homework and taking notes:

Keep a notebook where you take notes in ALEKS and record your work for the homework problems. There are multiple reasons to take notes when using an online homework system.

- Writing notes will help you prepare for the exams which will also be written. You want to practice writing up clear solutions before you are in a testing situation.
- Notes will also give you problems to review before exams.
- Having the problem and your work is helpful when you ask for help from your instructor, a tutor, or the math help desk.
- Clearly writing down your steps organizes your thinking and helps you learn the process.

Here's what should go in that notebook:

- Notes from the video lectures or the book in ALEKS on important topics.
- Notes from the homework
 - Clearly state the problem, listing all the given information.
 - Show all the major steps involved in solving the problem.
 - Clearly state your answer. Word problems should have complete sentences for answers and include appropriate units (inches, square feet, etc.)

I recommend you organize your notebook by sections in the book, as ALEKS will move to topics you are ready to learn rather than move section by section.

Homework and the Whole Pie

Your goal is to learn all the topics of 111 by the end of the term, 100% of your pie. Five percent of your grade is how dedicated to what percentage of the whole pie you learn by the end of the term.

After completing an objective or after learning 20 topics and spending a minimum of 5 hours in ALEKS, you will earn a knowledge check. Think of these as periodic quizzes to help check your learning as you go. Any topic you retain will go into your “mastered” portion of your pie. Any topic you need to review will move back into your learning path so you can review and master that topic. While this can temporarily reduce your pie progress or whole pie percentage, it won’t change your grade on any previous homework objective. It will also help you learn and master content before an exam, and keep you from getting stuck because of pre-requisite material.

The last objective in each module is a “Module Review” objective containing important topics from that module. You want to learn all of those topics prior to taking your paper and pencil exam to make sure you have seen all the course content for that module. There are four assigned comprehensive knowledge checks that will quiz you on what you have learned in the class prior to each Module Review. **You must take those within the window they open and close (see course calendar or ALEKS calendar).** This knowledge check will look for understanding of the percentage of ALEKS pie topics you would know if you learned all of the pre-requisite and goal topics up to that point: Mod 1 -71%, Mod 2 -85%, Mod 3 -97%, Mod 4 -100% of your pie.

Testing: There are three module tests and one comprehensive final exam. These will be paper-and-pencil tests where you must show your work (you can practice this by writing up your homework). You may use a calculator on the tests. The tests will be taken at an official proctored testing site *mutually agreed upon* at the beginning of the term. You may test at any of the Linn Benton testing centers or another official proctor location, which are usually other colleges or libraries. **If you will NOT be testing in the Albany campus Testing Center, you need to notify me where you will be testing by the end of week one. Any changes should be made at least a week before the test deadline.** If I don’t receive an email from you in week 1 with the subject “Testing Location” I will assume you will be testing in the Albany campus Testing Center.

Each test deadline is marked on the course calendar and in the ALEKS calendar. The test will be available two days before the testing deadline and you may take it at your convenience during that window. If you want to take a test more than two days before a deadline please contact me in advance. Make sure you are aware of the hours of your chosen testing site. At LBCC sites you do not need to make an appointment.

Being Successful and Getting Help: There is help and support available to you—do not hesitate to seek it out when you have difficulty in the class.

Help Desk - Each of our campus locations has a Math Help Desk. This is a place where you can get drop in help with your math questions.

Math Angle - in the Albany Learning Center is specifically for 111 and 112 help.

Tutoring - You are eligible for 3 hours a week of free tutoring services from the Tutoring Center. See the tutoring center for more details.

Books and videos - Each homework assignment has resource links on the right of the learning page including your ebook and videos. Additionally, there is a whole internet full of videos and tutorials at your fingertips!

Academic Honesty

I assume that you are ethical and honest. However, if there is an incident of academic dishonesty (cheating), you will receive a score of zero for that test/assignment and the incident will be reported to the college administration for possible further disciplinary action. If there is a second offense, you will receive a grade of F for the course and the incident will be reported to the college administration with a recommendation for disciplinary action.

Special Circumstances

Students who have any emergency medical information the instructor should know of, who need special arrangements in the event of evacuation, or students with documented disabilities who may need accommodations, should **make an appointment with the instructor as early as possible, no later than the first week of the term.** If additional assistance is required, the student should contact the Center for Accessibility Resources at 917-4789.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws.

Statement of Inclusion

The LBCC community is enriched by diversity. Each individual has worth and makes contributions to create that diversity at the college. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. (related to Board Policy #1015)

Basic Needs

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Single Stop Office for support (917-4877, SinglestopatLBCC@linnbenton.edu, or on the web under student support for current students). This office can help students get connected to resources to help.