

Instructor: Joe Collins

Email: collinj@linnbenton.edu

Virtual Office Hours: Mon: 4 - 7 Tue: 12 - 4 Thu: 12 - 4

I will be available at the Math Help Desk during these times <u>https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/math-support.php</u>

MTH 95 Intermediate Algebra Course Description

Intermediate Algebra is a course that develops the concept of a function. It is designed for the student who has an algebraic foundation (Math 75). Topics include an investigation of different functions, their graphs, and properties. The functions included are linear, quadratic, polynomial, radical, and exponential. Problem solving, technology, and cooperative learning is emphasized throughout the course. During the term, students will learn to recognize and express mathematical ideas graphically, numerically, symbolically, and in writing. Application problems are realistic with some data to be collected, analyzed and discussed in a group setting with results submitted in written form. Credits 4 Prerequisite: MTH 75 or Placement into the course.

MTH 095 Student Learning Outcomes

- 1. Interpret and analyze functions to find information such as domain, range, variable and function values by using a variety of tools that may include graphs, tables or given equations.
- 2. Model application problems using appropriate algebraic models, which may include linear, quadratic, and exponential.
- 3. Communicate mathematical concepts, processes, and solutions.
- 4. Apply algebra skills to topics such as factoring polynomials, solving quadratic equations, and simplifying expressions.

Required Materials

- **Tablet or Laptop** (Avoid Chromebooks.) To check the minimum computer specifications to use ALEKS and the lockdown browser, go to the webpage at https://www.aleks.com/support/lockdown_system_requirements
- **Computer microphone and webcam** is a school-wide general requirement for test taking.
- ALEKS 360 access code for 11 weeks. This should cost \$60. (If a 52-week code was previously purchased, that may be continued.)
- For proctored testing there will be a required **lockdown browser download** and video monitoring.

• Math 95 Course Materials Packet ordered through the LBCC bookstore to be mailed.

Recommended Materials

- Non-graphing, scientific calculator for testing. Graphing Calculators are not allowed on tests.
- Three ring binder for your course activity packet, ALEKS notes, and class notes

Grading Policies

Category	Percent of Grade	Grading Scale
ALEKS Weekly Objectives	20%	A: 90 -100%
ALEKS Topics/Pie Overall	5%	B: 80 – 89%
Weekly Packet Homework	25%	C: 70 - 79%
ALEKS Skills Test 1	5%	D: 60 - 69%
ALEKS Skills Test 2	15%	F: 0 - 59%
Midterm Exam	12%	
Final Exam	18%	

You may view your grades on the ALEKS website.

A grade of Incomplete may be assigned at the discretion of the instructor under special circumstances. The student must have completed the majority of the course, been in regular attendance, and maintained a passing grade in the course prior to the special circumstance.

Tests

All exams and skills tests will be taken from your own home and will be proctored using a lockdown browser and video camera monitoring. The lockdown browser is a one-time download. There are no phones, notes, or graphing calculators allowed during any of the tests.

You are, however, allowed the ALEKS calculator on the skill checks and scientific calculator on the midterm/final. The midterm/final also allows a 3x5 notecard.

- ALEKS Skills Test 1 is a proctored knowledge check and is not timed. If you are at 57% of your Aleks pie at this point, you will do fine. It can be taken on October 14th through 15th.
- The **Midterm Exam** will be taken in ALEKS and it has a time limit of two hours. If you miss this test you may retake it for a maximum score of 80%. If you don't do well, the midterm exam grade can be replaced by the final exam score, up to a maximum of 75%. It can be taken November 4th through 5th.

- ALEKS Skills Test 2 is a proctored knowledge check and is not timed. This is to test you on your comprehensive knowledge of all the topics in Aleks. It can be taken on November 24h through 25th.
- The **Comprehensive Final Exam** can be taken on December 7th through 9th.

ALEKS Homework

Class Code: **AKAVR-RXD63** - This will give you access to the class. Financial Aid Code: **055DB-3955A-216DF-D33E7.** Use if you don't have 11 week code yet.

ALEKS is an adaptive online homework website (www.aleks.com). You will need to purchase an access code. Your skills work will be completed on this site. Each week's skills, called "Objectives," will be available for a given length of time and you must learn those skills and demonstrate mastery by the deadline date and time. Your score at the time of the deadline will be recorded as a homework grade for that week. Students who finish their ALEKS work before the deadline can work on other topics in the course pie.

ALEKS Homework Guidelines

You should keep a notebook of loose-leaf paper for your ALEKS homework. You are expected to work through each problem and then write up neat, readable solutions for your notebook. Include the original problem unless it is a lengthy word problem. This will give you a study reference before testing.

Weekly Packet Homework

Every Sunday you will have an assignment to turn in from the Course materials packet. It is to be uploaded to moodle under the specific activity name and date before 11:59 every Sunday before the course ends. To do this, you may either scan or take a photo of your work. Here, I will grade them and upload back a graded copy.

Late Work

You are allowed two latepasses that give a 24 hour extension for turning in activities from the packet. Your Aleks Weekly objectives grades/dates are not able to be adjusted. If you find yourself in an emergency situation where you are unable to do coursework, let me know

Videos online

Since this class is asynchronous (meaning we will not meet at a specific class time), I will be uploading videos and posting them on Moodle for important lessons. In these videos, I will go through different concepts and examples for you to use in the packets and Aleks homework. I recommend that you watch these videos on the days they are listed.

Help

If you have questions, PLEASE ask! I have scheduled office hours at the Math Help Desk but you're welcome to get help at other times too. <u>Study groups</u> are encouraged! Many students find that working with classmates is the best way to learn and understand the material. Don't forget about the **e-book and videos** available on ALEKS.

Use the Learning Center and Math Help Desk

The Learning Center is an excellent resource, where you can get help with your homework. While we are learning remotely, you may get math help remotely. On the LBCC website you will find information about how to get help from math instructional assistants or tutoring. Go to the website at the link https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/math-support.php

LBCC Email

You are responsible for all communications sent via ALEKS, Moodle, and to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through Student Email.

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. Cheating includes, but is not limited to, copying another student's work; giving another student your work to copy; telling other students what problems are on an exam; getting answers or test questions from another student; or using any unauthorized resource during an exam, such as a phone, another computer or tablet, a book, notes, or a person.

Special Circumstances

LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in this class, please contact your instructor as soon as possible to discuss your needs. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the <u>CFAR Website</u> for steps on how to apply for services or call <u>(541) 917-4789</u>. Online or virtual course accommodations may be different than those for on-campus courses, so it is important that you contact CFAR as soon as possible.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our <u>Board Policies and Administrative Rules</u>. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: <u>linnbenton-advocate.symplicity.com/public_report</u>

The instructor reserves the right to make changes to the syllabus/calendar at any time.

Tentative Term Schedule:

Week 1	HOUR	Ebook Sections: 7.3, 16.1 and 16.2	
28-Sep	1	Brief Introductions and Syllabus, ALEKS Initial Knowledge Check	
to	2	Function Carnival Desmos, Functions Representations	
4-Oct	3	Relation and Function Vocabulary USES EBOOK	
	4	Dimensional Analysis, ALEKS Dimensional Analysis Quiz	
		Drop classes for a full refund until Monday of week 2.	
Week 2		Ebook Sections: 11.4, 11.5, 11.6, 16.2, 16.3, and 16.5	
5-Oct	1	Linear Equation Quick Sort, Linear Equations and Linear Functions	
to	2	Linear Function Application: Draining Liquid	
11-Oct	3	Variation	
	4	Variation, Desmos Growth Mindset	
Week 3		Ebook Sections: 13.1, 13.2, 13.3, 13.6, 18.2	
12-Oct	1	Discovering Properties of Integer Exponents	
to	2	Properties of Exponents Matching, Integer Exponent Practice	
18-Oct	3	Integer Exponent Critical Thinking, Exponent Properties Study Guide,	
		ALEKS Skills Test 1 - Opens Wednesday, October 14, Closes	
		Thursday, October 15	
	4	ALEKS Rational Exponent Quiz and Follow-Up	
Week 4		Ebook Sections: 10.6,18.1, 18.2, 18.3, 18.5	
19-Oct	1	Rational Exponent Application: Birds	
to	2	Solving Equations for a Variable	
25-Oct	3	Simplifying Radicals, ALEKS Simplifying Radical Expressions Quiz	
	4	Radical Function Application: Tsunamis	
Maak E		Eback Continues 12.5, 12.5, 16.2, 16.2, 10.1	
Week 5	4	Ebook Sections: 13.5, 13.6, 16.2, 16.3, 18.1	
26-Oct	1	Introduction to Graphing Radical versus Linear Functions	
to	2	Radical Functions Exploration, Desmos Radical Function Match-Up	

1	-Nov	3	Begin Introduction to Polynomials, Growth Mindset 2
		4	Finish Introduction to Polynomials
w	eek 6		Ebook Sections: 14.1, 14.2
	2-Nov	1	Classifying Polynomials-Who Am I?
to	. 1100	2	Midterm Exam Review
	B-Nov	2	Midterm Exam November 4 or November 5
0		4	Factoring Out a GCF and Factoring Basic Trinomials
W	eek 7		Ebook Sections:14.1, 14.3, 14.4, 14.5, 14.7
)-Nov	1	Factoring by Grouping and "ac" Method
to		2	Factoring Special Products
	5-Nov	3	Choosing and Applying Factoring Methods
	0 1107	4	Roots and Factors: Solving Quadratic Equations
		-	Withdraw from classes online until Sunday of week 7.
W	eek 8		Ebook Sections: 14.8, 18.8, 19.1, 19.2, 19.4
	6-Nov	1	Real Versus Imaginary Numbers, Solving Quadratic Equations:
	0-INUV		Square Root Method
to		2	Solving Quadratic Equations: Completing the Square
22	2-Nov	3	Solving Quadratic Equations: The Quadratic Formula
		4	Graphing Quadratic Functions and Solving by Graphing, Assign
			Quadratic Function Application: Projectile Motion
W	eek 9		Ebook Sections: 19.4, 19.5, 20.2
23	3-Nov	1	Solving Quadratic Equations All Methods or Parabolas Match-Up
to		2	Exponential Function Introduction, Exponential Functions
			Applications
29	9-Nov	3	ALEKS Skills Test 2 is set for November 24 and 25
		4	THANKSGIVING
W	eek 10		Ebook Sections: 6.8, 20.2
	0-Nov	1	Patterns, Growth, and Models, Exponential Versus Linear Change
to		2	Exponential Function Application: M&M Modeling or Comparing
			Models with Regression
6	-Dec	3	Desmos Modeling Domain and Range, Desmos Graphing Stories,
		-	Review for Final Exam
		4	Review for Final Exam
Fina	ls Week	l	

to	
9-Dec	