![Linn-Benton Community College logo]

MTH 95 Intermediate Algebra, Fall 2020, CRN 25716

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Virtual Office Hours: Schedule zoom meeting appointment.

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.
- **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%
In-Class Work	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%	

Students may view their 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 notes or graphing calculators allowed during any of the tests.

- The **Midterm Exam** will be taken in ALEKS and it has a time limit of two hours. If you miss this test you will get a score of zero. However, the midterm exam grade may be replaced by the final exam score, up to a maximum of 75%. The *tentative* midterm exam date is listed on the course calendar.
- The deadline for the **Comprehensive Final Exam** is Wednesday December 9, 5:30-7:30
- The two **ALEKS Skills Tests** will be taken in ALEKS. These tests are not timed.

Homework

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.

In-Class Work

Students will be actively participating in learning activities and group work every class meeting. Generally, these activities must be done in class and cannot be made up. These are the lessons for this course. The activities are designed to help students develop and understand the concepts behind the math skills and how to apply them to various situations. The experiences gained from working in the groups will be a major component in determining the student's success in this course. **Attendance is therefore required.**

Drop for NonAttendance or NonParticipation

During the first week of the term, the instructor may drop students for not attending class, not completing work, and not completing the ALEKS initial knowledge check by a certain day.

Attendance Policy

If you miss four hours of class (1/10 of the class) you will get a warning. If you miss eight hours of class (20% of the class) your final course grade will drop one letter grade. Essentially, there are five letter grades, and if you miss 1/5th of the class, you will not be eligible for the top letter grade.

Late Work

No late work will be accepted.

Notes online

Class notes will be available in Moodle.

Help

If you have questions, PLEASE ask! **Study groups** 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 Café

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/index.php

Additionally, the Math Café offers success coaching by appointment that can include
- study strategies, notetaking, learning with online homework, time management schedule, etc.
- making a catch-up plan, to get up to date on assignments.
- preparing for an exam.
- understanding and navigating online homework.

Expectations

- I expect that my students will be involved in class. This includes being present when expected, asking questions and participating in discussions and group work. (The instructor notes excellent attendance/attitude and will sometimes "bump up" a borderline grade for such students.)
- You should attend online class sessions prepared. Spend **at least 8 hours per week working on this class.**
- I expect you will be respectful of everyone in the class, in word as well as behavior.

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 students 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 **CFAR Website** for steps on how to apply for services or call (541) 917-4789. 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 Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public_report

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

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
Week 5		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
Week 6		Ebook Sections: 14.1, 14.2
2-Nov	1	Classifying Polynomials-Who Am I?
to	2	Midterm Exam Review
8-Nov	3	**Midterm Exam November 4 or November 5**
	4	Factoring Out a GCF and Factoring Basic Trinomials
Week 7		Ebook Sections:14.1, 14.3, 14.4, 14.5, 14.7
9-Nov	1	Factoring by Grouping and "ac" Method

to	*2*	*Factoring Special Products*
15-Nov	*3*	*Choosing and Applying Factoring Methods*
	4	*Roots and Factors: Solving Quadratic Equations*
		Withdraw from classes online until Sunday of week 7.
Week 8		*Ebook Sections: 14.8, 18.8, 19.1, 19.2, 19.4*
16-Nov	*1*	*Real Versus Imaginary Numbers, Solving Quadratic Equations: Square Root Method*
to	*2*	*Solving Quadratic Equations: Completing the Square*
22-Nov	*3*	*Solving Quadratic Equations: The Quadratic Formula*
	4	*Graphing Quadratic Functions and Solving by Graphing, Assign Quadratic Function Application: Projectile Motion*
Week 9		*Ebook Sections: 19.4, 19.5, 20.2*
23-Nov	*1*	*Solving Quadratic Equations All Methods or Parabolas Match-Up*
to	*2*	*Exponential Function Introduction, Exponential Functions Applications*
29-Nov	*3*	*ALEKS Skills Test 2 is set for November 24 and 25*
	4	*THANKSGIVING*
Week 10		*Ebook Sections: 6.8, 20.2*
30-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*
Finals Week		
7-Dec		***FINAL EXAM in ALEKS December 7 through December 9***
to		
9-Dec		*Assess Outcomes*