# Linn-Benton Community College

## MTH 95 Intermediate Algebra Online

Term: Spring 2022                                     CRN: 40347
**Instructor**: Elizabeth Cunningham          **Class times**: online course
**Email**: [cunnine@linnbenton.edu](mailto:cunnine@linnbenton.edu)          **Drop-in Hours**: Tues & Thurs 9AM-10AM
**Virtual Office:** [Zoom Drop-in](#)                                         or by 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.

**What will you learn in this class?**

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.

**What materials do you need for this class?**

- **Tablet or Laptop** (Avoid chromebooks.)
    - Check minimum requirements for [ALEKS software](#) and [Lockdown Browser](#)
- **Computer microphone and webcam** is a school-wide general requirement.
- **ALEKS 360 access code for 11 weeks.** (If a 52-week code was previously purchased, that may be continued.)
    - Temporary 2 week access code: **4E055-8A3EA-E9799-57F74**
- **Math 95 Course Materials Packet for Fall 2021 through Summer 2022** ordered through the LBCC bookstore to be mailed or picked up.
- For proctored testing there will be a required **lockdown browser download** and video monitoring. Reliable internet will be required.
- Three ring binder for your course packet and ALEKS notes (highly recommended).
- Non-graphing, scientific calculator for midterm and final. Graphing Calculators are not allowed on exams.

**How will your Grade be Calculated?**

Your grade will be calculated using a weighted average based on the percentages below:

20%   ALEKS Weekly Objectives
5%     ALEKS Topics/Pie Overall
25%   Activities and Quizzes
5%     ALEKS Skills Test 1
15%   ALEKS Skills Test 2
12%   Midterm Exam
18%   Final Exam

*Your letter grade for the course will be assigned based on the grading scale:*

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

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 passing the course prior to the extenuating circumstance.

**Tests**

The ALEKS 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.

The Midterm and Final Exams will be taken in-person in the scheduled window during testing center open hours *unless alternate arrangements are made with your instructor.* The LBCC Testing Centers in Albany and Corvallis will proctor your tests for free.
If you are out of town, you can look for a proctoring service near you. Typically community colleges and some libraries offer proctoring services for a fee.
If you cannot take an in-person test for medical reasons, please let your instructor know as soon as possible (at the beginning of the term for long-term concerns, ASAP for covid quarantine situations).

| Test | Deadline |
|---|---|
| ALEKS Skills Test 1 - unlimited time - online | Wednesday - Thursday of Week 3 |
| Midterm Exam - 2 hour time limit - in-person | Wednesday - Thursday of Week 6 |
| ALEKS Skills Test 2 - unlimited time - online | Wednesday - Thursday of Week 9 |
| Final Exam - 3 hour time limit | Monday - Tuesday of Final's week |

**Coursework**
We will be using Moodle for this course. Each week you will have several assignments in Moodle to complete in addition to your ALEKS homework. You will be actively participating in learning activities and group discussion each week. Generally, these activities must be done by the due date and cannot be accepted late, but you can always work ahead to accommodate your schedule. The activities and discussions are designed to help you develop and understand the concepts behind the math skills, and how to apply them to various situations. The experiences gained from working on activities and class discussion forums will be a major component in determining your success in this course. Participation is therefore required. You will need to **log into Moodle several times each week** to participate in the course activities and discussions.

**Activities**
These are the lessons for this course. Most can be found in your Math 95 course packet, and a few will be given via a link or video in Moodle. Following an activity you will either: (1) complete a quiz on that activity, (2) engage in a concept chat around the activity, or (3) upload your completed activity, review solutions, reflect on mistakes, and discuss what you learned with classmates at the end of the week.

Note that the purpose of the follow-up for each activity is to give you feedback on whether or not you have learned the material from the lesson, so you can go back and learn anything you missed. You should make it your goal to learn the material of the activity, rather than to get a decent grade, as it is often possible to get a good grade for the activity without learning what you need to pass the course.

Detailed instructions for each activity will be provided.

**Homework**
ALEKS is an adaptive online homework system that you will be accessing through Moodle. You will need to purchase an access code to access the homework after week 1.

Each week you will have specific topics, called "objectives", you must learn followed by a "progress knowledge check" to see which of those topics you have mastered and retained. Think of the knowledge check as a periodic quiz to help you and ALEKS ascertain which of those topics you might need to revisit. Beware that after a knowledge check you will frequently see topics reappear in your pie that you thought you already learned. You should learn all of the weekly topics, complete the weekly knowledge check (if there is one—they are not assigned every week), and go back to work on any topics from the week that you need to revisit before the homework deadline. 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 also 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.

**Getting Help**
If you have questions, PLEASE ask! I will typically respond to email within 24 hours during the week. I have scheduled zoom drop-in hours or we can make an appointment. **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 /The Math Cafe (Click the links for hours and locations)**
The Learning Center WH-226, and Math Cafe WH-208 are excellent places to get help. They also have virtual help sessions via zoom. The other LBCC campuses have similar facilities with Math Help available.
- The Math Cafe has a Zoom Online Help Room (see above link for hours).
  Instructional assistants are available to answer your math, ALEKS and study skills questions.
- The Learning Center offers some **free individual and small group tutoring** in addition to the help desks.
- There is free wireless available in the Math Café and the Learning Center (and lots of places to plug in so your battery won't be depleted.)

- The relaxed atmosphere and table arrangement in the Learning Center provide a great location for **study groups** to meet and work.

(Please remember to log on and log off the computer with each visit to the Learning Center.)

## Computers
Computer labs are open to students in the Library and in the Learning Center. Laptops are usually available for short-term check out from the Library.

## Expectations:
- I expect that my students will be involved in and working on this class several times a week. This includes asking questions and participating in group discussions, watching videos, etc.
- Spend **at least 12 hours per week working on this class.**
- You should log into Zoom meetings prepared (this means you should have your notebook, table/laptop, work, etc. ready).
- I expect you will be respectful of everyone in the class, in word as well as behavior. Discussion board posts should be respectful and supportive of the success of everyone in the class.

## LBCC Email:
You are responsible for all communications sent via ALEKS and to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College.

## Academic Honesty:
I assume that you are ethical and honest. During proctored exams you must not access outside notes, help from others, a graphing calculator, or your cell phone. 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.

## Request for Special Needs or Accommodations
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 think you may be eligible for accommodations but are not yet registered with CFAR, please visit the CFAR Website for steps on how to apply for services. Online course accommodations may be different than those for face to face courses, so it is important that you make contact with 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.**

**Tentative Course Calendar:**

| Week | Topics |
|------|--------|
| 1 | Course Introduction, Functions, Dimensional Analysis |
| 2 | Linear Functions, Variation, Growth Mindset |
| 3 | Rules of Integer and Rational Exponents, **ALEKS Skills Test 1** |
| 4 | Solving Equations for Variables, Simplifying Radicals, Radical Application |
| 5 | Radical Functions, Rational Exponent Functions, Intro to Polynomials |
| 6 | Polynomials, **Midterm Exam**, Factoring |
| 7 | More Factoring Methods, Solving Quadratic Equations |
| 8 | More Methods for Solving Quadratic Equations, Quadratic Functions |
| 9 | Exponential Functions, **ALEKS Skills Test 2** |
| 10 | Applications of Exponentials, Modeling |
| 11 | Review for Final Exam, **Final Exam** |