

# **Math 75 Variables and Linear Equations**

Term: Fall 2021 CRN: 26546 Class Code: FJUNG-PQ4AJ

#### Instructor:

Email: rista@linnbenton.edu

Office Hours: Wednesday 11:00-12:50pm

Office: TBD

## MTH 075 Variables and Linear Equations Course Description

An introductory algebra course covering variables, writing and solving linear equations, graphing linear equations, and applications of linear models including proportions and systems of equations. Group work, problem-solving, and communication are emphasized in this course. Students will develop skills in conversion of measurement units and scientific notation.

Credits: 4 Prerequisite: MTH 050 or Placement into the course.

## MTH 075 Student Learning Outcomes:

- 1. Solve linear equations
- 2. Graph linear equations
- 3. Model real world applications with linear equations
- 4. Communicate the meaning of a linear equation
- 5. Solve systems of equations

## **Required Materials:**

- Tablet or Laptop (available for purchase or rent in the bookstore if you don't have one.)
  Minimum <u>specifications for use with ALEKS software</u>: https://www.aleks.com/support/system\_requirements
- ALEKS access code for 11 weeks or for 52 weeks if moving on to MTH 95. (If a 52-week code was previously purchased, that may be continued.)
- Course Materials Packet

# **Grading Policy**

Your grades will be based on the following categories:

#### **Tests**

- Two ALEKS Skills Tests, taken within the ALEKS program.
- Two Concept Exams taken on paper.
- There are no retests allowed for this course.
- There is not a final exam for this course.

### Homework

ALEKS is an adaptive online homework website (www.aleks.com). You will need to purchase an access code in order to get logged in. Your skills work will be completed on this site. Each week's skills 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 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.** 

## Grades will be calculated based on the following percentages.

Category	Percent of Grade
ALEKS Weekly Objectives/Homework	20%
ALEKS Topics Completion	5%
ALEKS Skills Tests (2)	20%
In-Class Work	20%
Concept Exams (2)	30%
Final Project	5%

Grading Scale
A: 90 -100%
B: 80 – 89%
C: 70 - 79%
D: 60 - 69%
NP: 0 - 59%

**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 passing the course prior to the "special circumstance".

# What can you do to increase your success in this course?

## **Ask for Help**

If you have questions, please come see me and ask. I have scheduled office hours but you are welcome to email and set up Zoom appointments as well. Study groups are encouraged! Many students find that working with classmates is the best way to learn and understand the material. Do not forget about the **e-book and videos** available on ALEKS.

## **Use the Learning Center**

The Learning Center, WH226, is an excellent place to study and to get help with your homework. (Please remember to log on and log off the computer with each visit to the Learning Center.) The other LBCC campuses have similar facilities with Math Help available.

- There is free WiFi available in 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.
- Instructional assistants are available at the help desk and the Math Angle to answer your math and ALEKS questions
- The Learning Center offers some free individual and small group tutoring in addition to the help desk.

## **Regular Access to a Computer**

Your homework for this class will mostly be online in ALEKS. 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.

## Other things I have noticed successful Math 75 students do:

- They are involved in class. This includes being present, asking questions and participating in discussions and group work.
- They come to class prepared (this means you should bring your notebook, tablet/laptop, etc. in addition to having your course packet).
- They spend about 2 hours in ALEKS after each class. I've noticed students that work on ALEKS regularly throughout the class are better prepared to learn the concepts in the activities.

# **Course and Campus Policies**

## **Classroom Community**

On the first day of class we discussed things you should do and not do during group work. Here's a summary of what we decided: Good group members participate. They are actively listening and offer their own perspectives at appropriate moments. We are looking for students to be engaged with their mind and body in the activities and group discussion. Everyone at the table should be treated with respect and silence is discouraged. We are looking for individuals to bring their best and have a good attitude about exploring math concepts.

### 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. 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.

## **Special Circumstances or Accommodations**

You should meet with your instructor during the first week of class if:

- You have a documented disability and need accommodations.
- Your instructor needs to know medical information about you.
- You need special arrangements in the event of an emergency.

If you have documented your disability, remember that you must make your request for accommodations through the Center for Accessibility Resources (CFAR) Online Services webpage every term in order to receive accommodations. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR Website for steps on how to apply for services or call (541) 917-4789.

#### **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 Roadrunner Resource Center for support at 541-917- 4877, or schedule an appointment on the web at <a href="www.linnbenton.edu/rrc">www.linnbenton.edu/rrc</a>. Our office can help students get connected to resources to help. Furthermore, please notify the instructor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

## **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>

# **Weekly Overview of the Term**

#### Week 1

Activity 1 Working Together

Activity 2 Central Park

**Activity 3 Writing Expressions** 

Activity 4 Properties of Real Numbers

#### Week 2

Activity 5 Like Terms

Activity 6 Introduction to Equations

Activity 7 Solving Equations

**Activity 8 More Solving Equations** 

### Week 3 - Test 1 Due

Test 1 Review Day

Activity 9 Working with Formulas

Activity 10 Crumple and Shoot

Activity 11 Planning a Spaghetti Party

#### Week 4

Activity 12 Solving Applications

Activity 13 Inequalities on the Number Line

Activity 14 Reading the Story of a Graph

#### Week 5 - Test 2 Due

Test 2 Review Day

Activity 15 Introduction to Lines

Activity 16 Put a Point on the Line

Activity 17 Investigating Rates of Change

#### Week 6

Activity 18 Match My Line

**Activity 19 Linear Populations** 

Activity 20 Land the Plane

Activity 21 Applications of Equations of Lines

## Week 7

Activity 22 Regression

**Activity 23 Bouncing** 

## Week 8 - Test 3 Due

Test 3 Review

**Activity 24 Applications** 

Activity 25 Solving Systems by Graphing

### Week 9

Activity 26 Racing Dots

Activity 27 Wafers and Crème

Activity 28 Solutions to Systems of Equations

Introduction to Project

## Week 10 - Test 4 Due

**Project Work Days** 

**Test 4 Review**