

# MTH 75 Variables and Linear Equations

Term: Winter 2020

CRN: 33804

Class Code: 70

**Instructor: Esther Chapman**

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**Office Hours:** By appointment.

## **MTH 075 Variables and Linear Equations Course Description**

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

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.

### **By the end of Math 75 you will be able to:**

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 bookstore if you don't have one.) Minimum [specifications for ALEKS software](https://www.aleks.com/support/system_requirements): [https://www.aleks.com/support/system\\_requirements](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 Activity Packet - Internet version (Activities are also available to download on Moodle)
- Scientific Calculator (optional)

### **Grades will be calculated using a weighted average based on the percentages:**

- 20% ALEKS Homework
- 5% ALEKS Topics Completion ("whole pie")
- 20% ALEKS Skills Tests (Test 1- 5%, Test 4- 15%)
- 20% Moodle Activities and Discussion Posts
- 30% Two Written Concept Exams (15% each)
- 5% Final Project

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

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

You may view your grades in Moodle at any time.

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".

## Activities and Discussions

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. Students will be actively participating in learning activities and group discussion each week. As a rule, these activities must be done by the due date and cannot be accepted late. The activities and discussions 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 on activities and class discussions 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

Each week you will have at least one course activity to complete. You will either upload your completed activity to receive feedback from your instructor or you will complete a Concept Check (Quiz) for that activity. Detailed instructions for each activity will be provided.

### Concept Chats

Each week there will be a concept chat with a new topic. To receive full credit for the week's discussion post you must post a response AND respond to at least one other person's post. My hope is that the discussion will be engaging and help you think about the week's math topics from a different perspective. Activities and discussions are designed to help you gain a conceptual understanding of the material you are learning. You can read more about the philosophy the LBCC math department has adopted for their courses in [Why are there activities in Math 75?](#).

## ALEKS Homework

ALEKS is an adaptive online homework system. ALEKS will be accessed through Moodle. You will need to purchase an access code to access the course. Your skills work will be completed using ALEKS. Each week, you will have specific topics you must learn the 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 for testing.

## Tests

The ALEKS Skills Tests and Concept Exams must be proctored at an LBCC campus. Once the instructor has signed your testing ticket, you will have a few days to go in and take the test on your own time. These tests are not timed. Refer to the test ticket for further information. There are no retests allowed for this course. There is not a final exam for this course.

## Attendance Policy

Your regular attendance and thoughtful participation in class are essential for your success in learning math. Your regular online attendance is mandatory. If there is a week you will be unable to log in and participate in the class, please let your instructor know ahead of time by email. Students are responsible for any material, updates, or other information in available in Moodle.

## Late Work

Late work will generally not be accepted. Activities cannot be made up. Discussion posts cannot be made up. In the case of extreme circumstances beyond the student's control, alternate arrangements may be made and will be at the discretion of the instructor. You may also be required to present written proof of your circumstances. If you miss an exam you will receive a zero for that exam. You may take up to one exam late for up to a maximum score of 80%.

## Help

If you have questions, PLEASE ask! You are welcome to email anytime or schedule a time to visit my office or have an online video chat. **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](#) (Click the link for hours and locations)

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 wireless available in the Learning Center (and lots of places to plug in.)
- 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 free individual and small group tutoring in addition to the help desk.

## 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 students will be involved in the class. This includes logging in regularly, asking questions, along with participating in discussion boards and activities.
- I expect you will be respectful of everyone in the class. 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 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.

## Request for Special Needs or Accommodations

Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone [541-917-4789](tel:541-917-4789) or via Oregon Telecommunications Relay TTD at [1-800-735-2900](tel:1-800-735-2900) or [1-800-735-1232](tel:1-800-735-1232). Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

## 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: [innbenton-advocate.symplicity.com/public\\_report](http://innbenton-advocate.symplicity.com/public_report)

# Winter 2019 Math 75 Internet Calendar

I reserve the right to change the activities at any time.

## **Week 1**

Introduction to the course  
Syllabus Quiz  
ALEKS Initial Knowledge Check  
Activity 1 Central Park  
Concept Chat  
ALEKS Week 1 Homework

## **Week 2**

Activity 2 Properties of Real Numbers  
Activity 3 Like Terms  
Activity 4 Introduction to Equations  
Activity 4 Quiz: Equations  
Concept Chat  
ALEKS Week 2 Homework

## **Week 3 – Test 1 Due Saturday**

ALEKS Test 1 (must be proctored)  
Activity 5 More Solving Equations  
Activity 6 Working with Formulas  
Concept Chat  
ALEKS Week 3 Homework

## **Week 4**

Activity 7 Planning a Spaghetti Party  
Activity 8 Applications with Equations  
Activity 9 Inequalities on the Number Line  
Concept Chat  
ALEKS Week 4 Homework

## **Week 5 - Test 2 Due Saturday**

Test 2 Written Test (must be proctored)  
Activity 10 The Story of a Graph  
Activity 11 Put a Point on the Line  
Activity 12 Investigating Rates of Change  
Concept Chat  
ALEKS Week 5 Homework

## **Week 6**

Activity 13 Match my Line  
Activity 14 Land the Plane  
Concept Chat  
ALEKS Week 6 Homework

## **Week 7**

Activity 15 Applications of Equations of Lines  
Activity 16 Linear Regression  
Concept Chat  
ALEKS Week 7 Homework

## **Week 8 – Test 3 Due Saturday**

Test 3 Written Test (must be proctored)  
Activity 17 Intro to Systems of Equations  
Activity 18 Solving Systems by Graphing  
Quiz  
Concept Chat  
ALEKS Week 8 Homework

## **Week 9**

Activity 19 Racing Dots  
Activity 20 Wafers and Crème  
Concept Chat  
ALEKS Week 9 Homework

## **Week 10 – Test 4 Due by Saturday**

Project  
Concept Chat

## **Finals Week - Project due by Wednesday**