

MTH 75 Variables and Linear Equations

Term: Spring 2019 CRN: 43500 ALEKS Class Code: YAD4T-DDTWC

Instructor: Nick Carr

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Office Hours: T,R 11:00am-11:50am

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 bookstore if you don't have one.) Minimum specifications for use with ALEKS software:
 - 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 (Available in the school bookstore).

Grading Policy

Your grades will be based on the following categories.

Tests:

- The ALEKS Skills Tests and Concept Exams will be taken in the Testing Center in RCH-111. 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.

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 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.

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 current 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".

Late Work

I generally don't accept late work without a good reason. I will work with students on a case by case basis to adjust deadlines if I feel like it is fair to do so.

Help

If you have questions, PLEASE <u>come see me</u> and ask! I have scheduled office hours but you're welcome to come in 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

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 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.

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 class. This includes being present, 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 come to class prepared (this means you should bring your notebook, tablet/laptop, etc. in addition to having your work with you). 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. Along these lines, I ask that you turn off and/or put away your cell phone, mp3 player, laptop, etc. during class unless it is being used for an activity so as to avoid causing a distraction.

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:

Students who have any emergency medical information the instructor should know of, who need special arrangements in the event of evacuation, or students with documented disabilities who may need accommodations, should make an appointment with the instructor as early as possible, no later than the first week of the term.

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 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 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 <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.

Calendar (adjust for your course or use the excel calendar)

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 12 Planning a Spaghetti Party

Week 4

Activity 11 Inequalities on the Number Line

Activity 13 Solving Applications

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