

# Math 75 – Variables and Linear Equations

## w/ Andrew Vosgien

### Winter Term 2019

CRN: 33621 TR 9:00am – 10:50am in WOH 112 Class Code: 76
CRN: 33620 WF 11:00am – 12:50pm in WH 227 Class Code: 75

### Instructor: Andrew Vosgien

Email: vosgiea@linnbenton.edu

Office: WOH 103

Office Hours: Tuesday 11:00am - 12:00pm, Wednesday 10:00am - 11:00am

### 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 ALEKS software: <a href="https://www.aleks.com/support/system">https://www.aleks.com/support/system</a> 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

#### **Recommended Materials:**

- Non-Graphing Scientific Calculator for classwork and testing (Test 2/Test 3)
- Three Ring Binder for your course packet, ALEKS notes, and class notes.

#### Grading

Category	Percent of Grade
Weekly Participation x9	5%
Weekly ALEKS Objectives x9	20%
Weekly Concept Checks x8	15%
Test 1 – ALEKS Skills (Computer)	5%
Test 2 – Concepts (Paper)	15%
Test 3 – Concepts (Paper)	15%
Test 4 – ALEKS Skills (Computer)	15%
Final Project	5%
ALEKS "Whole Pie"	5%

Grading Scale	
A: 90 -100%	
B: 80 – 89%	
C: 70 - 79%	
D: 60 - 69%	
F: 0 - 59%	
//h.m.// 111.1 1 1	

"NP" will be issued to students who pass all tests but don't earn a D or better

Students may view their current grades on the ALEKS website.

#### Participation:

This course has been designed around the philosophy of mathematical discovery through group investigation. Every class meeting you will be actively participating in learning activities and group work. These are the lessons for this course. The activities 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 in the groups will be a major component in determining your success in this course. To this end, you will receive a score based on your attendance and participation at the end of each week. The lowest weekly participation scores for each student will be dropped at the end of the term.

#### Weekly ALEKS 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. You will also receive a score your total progress through the ALEKS topics at the end of the term. Therefore, it is your best interest to go back and complete any topics you may have missed regardless if objective is past.

#### **ALEKS Homework Guidelines:**

While ALEKS will only require the final answer to the problems it presents you, it is highly recommended that you create an organized notebook for your ALEKS homework. Title each page with the topic that you are currently working on. Copy down the problems presented by ALEKS and show all your work (explaining steps as necessary) in your notebook. Doing this will create a valuable study reference to use before testing.

Please note that while many ALEKS problems allow the use of a calculator, many do not. It is in your best interest to not use a calculator on the problems that ALEKS doesn't allow one. Not only will this help to improve your math skills, but you will only be allowed the ALEKS calculator on our ALEKS Skills Tests.

#### Weekly Concept Checks:

At the beginning of each week we will have a short "Concept Check" assignment. For these Concept Checks, you will be given approximately 10 minutes to complete a couple conceptual questions and a single algebra question. The conceptual questions will be based on the topics and concepts from the previous week therefore any of your notes completed activities may be used as a resource. The algebra question will be similar to questions from the previous week's ALEKS objectives. You will answer the algebra question clearly showing all work, steps, and processes. Concept Checks cannot be made up. Your lowest Concept Check score will be dropped at the end of the term.

#### Tests:

The tests in Math 75 will consist of two different types of tests: ALEKS Skills Tests completed on the computer and Concept Tests given on paper. Both types of tests will be taken at the Student Assessment Testing Center (RCH-111). Once your testing ticket has been signed, you will have a few days to go in and take the test on your own time. These tests are not timed. For the ALEKS tests, the only calculator you will be allowed is the one ALEKS gives you on specific problems. You will be allowed to use a scientific calculator on the Concept Tests. Refer to the test tickets for further information.

Late ALEKS or Concept Test will be allowed for a limited amount of time and have a maximum score cap of 80% There are no retests allowed for this course.

#### **Final Project**

The last week of our class will be devoted to a final project. You will be working in pairs to answer a difficult, multi-part problem that will require the use of many of the different skills you will have learned in Math 75. Then, you and your partner will craft a professional report that clearly and concisely presents the problem, explains the strategy and processes needed to answer the question, presents the complete answer in an easy to understand manor, and uses graphs and visual aids to support your conclusion.

#### Late Work

If you are absent, late, or leave early, you cannot make up any missed Participation points. However, I will drop the lowest Weekly Participation score at the end of the term.

If you have a legitimate reason why you have been unable to invest the proper amount of time on your weekly ALEKS objectives, extensions may be issued on a case by case basis. Putting off your homework until the weekend, then running out of time is not a legitimate reason for an extension.

You cannot makeup a missed weekly Concept Check. However, I will drop the lowest weekly Concept Check score at the end of the term.

Late tests (ALEKS or Paper) will be allowed for a limited amount of time. Any scores on these late tests will be capped at 80%. If a significant time period has passed since a tests deadline, a late test will not be allowed.

### 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. **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/Math Café

The Learning Center, WH226, is an excellent place to study and to get help with your homework.

- 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 Math Café 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:**

- **Be Self Motivated!** The biggest factor in your success is you! Work hard, don't give up, and take the initiative to seek me out if you have questions or to get help when you need it!
- **Be Involved!** This includes coming to every class, asking questions, and participating in discussions and group work. You will only get out of this class what you're willing to put into it.
- Take the Activities Seriously! This course doesn't have a traditional textbook. The activities themselves
  will act as your resource. Make sure to thoroughly answer all the questions in the activities with enough
  detail that it will be useful later.
- Come to Every Class Prepared! This includes your activity packet, calculator, note taking materials, and your charged laptop/tablet. Forgetting something excuse you from participation
- Use ALEKS as intended! ALEKS is a very effective tool for improving your math skills when used as intended. Don't use calculators on the problems it doesn't allow calculators on. Don't let others do your homework for you. Don't be afraid of getting questions wrong and/or getting topics reassigned to you.
- Manage Your Time Wisely! Expect to spend at least eight hours a week outside of class working on your ALEKS homework. Specifically set aside time in your schedule for ALEKS. Don't wait until the weekend.
- Use the Learning Center/Math Café! Whether it's for understanding of concepts from the activities or skills in ALEKS, there is staff in the Learning Center/Math Café just waiting to help you be successful!
- **Be Respectful to Others!** I expect your words and behavior to be respectful to all. In that mindset, please refrain from any activities that might be a distraction to those around you.

#### 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 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: <a href="mailto:linnbenton-advocate.symplicity.com/public\_report">linnbenton-advocate.symplicity.com/public\_report</a>