

**MTH 50 Number Sense and Critical Thinking**

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## MTH 050 Number Sense and Critical Thinking Course Description:

Math 050 focuses on numerical literacy and on the four basic mathematical operations with whole numbers, fractions, decimals, percents, exponents, and square roots, and using them to model problems with both estimations and exact answers. Students will develop skills in basic arithmetic algorithms, including the use of formulas and basic geometry. The metric system, conversion of measurement units, and scientific notation is introduced. Signed numbers are introduced, including operations. Math 050 is presented with an emphasis on critical thinking and problem-solving.  **Credits:** 4 **Prerequisite:** none

## MTH 050 Student Learning Outcomes:

1. Demonstrate proficiency in estimating and comparing results of mathematical calculations and determine the reasonableness of the answer.
2. Perform the four basic mathematical operations on whole numbers, fractions, and decimals to obtain exact answers both with and without a calculator.
3. Perform operations involving signed numbers including exponents and evaluating expressions.
4. Model and solve problems using the four basic mathematical operations.
5. Demonstrate understanding and knowledge of the use of units including labeling measurements, applying units to solutions, and converting units by using dimensional analysis.

## Required Materials:

* Tablet or Laptop (available for purchase or rent in bookstore if you don’t have one.) [Minimum specifications for use with ALEKS360 software:](https://www.aleks.com/support/system_requirements) https://www.aleks.com/support/system\_requirements
* ALEKS360 access code for 52 weeks (also used in MTH 75 and 95).
* Course Materials Packet

## Grading Policy:

Your grades will be approximately based on the following:

ALEKS Weekly Objectives/Homework 20%

 ALEKS Whole Pie 5%

ALEKS Skills Tests (2) 20%

 In-Class Work 25%

Concept Exams (2) 30%

Grading Scale:

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

## Pass/No Pass Grading Option:

Students in this course have the option to select P/NP grading. Students earn a P grade if they opt for P/NP grading at registration and are otherwise earning an A, B, or C in the course. Students who opt for P/NP grading and are earning less than a C in the course will receive an NP.

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”.

## Tests:

* The 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.
* The **ALEKS Skills Tests** 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 taken in ALEKS and they 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. There will be an additional review assignment prior to each of the ALEKS tests. 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.**

## Attendance Policy:

Attendance is expected. If you are not in class you cannot take quizzes or turn in assignments. No late assignments will be accepted and no quizzes will be made up. If you know you will not be in class on a certain day let me know in **advance, not after** **you are absent.** Make every effort to attend each class.

## Late Work: No late work will be accepted without instructor approval

## Help:

If you have questions, PLEASE **come see me** 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 Math Cafe:

The Math Cafe 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. The Albany campus has the Math Café in WH-227, which is connected to the Learning Center.

* 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 Math Café and the Learning Center provide a great location for **study groups** to meet and work.
* Instructional assistants are available in the Math Cafe to answer your math, ALEKS and study skills questions for Math 50, 75, 95 and 98.
* The Learning Center offers some **free individual and small group tutoring** in addition to the help desk.

## Expectations:

* I expect that my students will be involved in class. This includes being present, asking questions and participating in discussions and group work.
* You should come to class prepared (this means you should bring your notebook, tablet or 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 [Board Policies and Administrative Rules](http://linnbenton.edu/42145BA0-3DCC-11E3-AA36782BCB47BBE7). 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](http://linnbenton-advocate.symplicity.com/public_report)

## The instructor reserves the right to make changes to the syllabus/calendar at any time.