Math 100: Basic Mathematics - Syllabus - Spring 2019

Instructor: William Hall
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Office Hours: Announced on Blackboard

Credit: 2 credits (These do not count towards your degree, but do count towards financial aid.)

Prerequisites: none

Required Materials: Course Notes for Math 100 available through CougPrintsPlus
ALEKS semester Access Code available through the Bookie or online through ALEKS.com

Modules Covered:
(1) Whole Numbers
(2) Signed Numbers
(3) Fractions
(4) Decimals
(5) Conversions
(6) Measurement
(7) Basic Algebra
(8) Proportion & Percent
(9) Formula & Application Problems
(10) Powers & Roots

Student Learning Outcomes: Once you successfully complete this course you will have a mastery of basic skills and facility in operations involving whole numbers, integers, variables, fractions, decimals, measurement, unit conversions, introductory algebra, inequalities, absolute value equations, proportion and percent, and finally powers and roots. You will be able to apply these skills to working with formulas and solving problems involving applications and will have the mathematical foundation to progress on to Math 103. These outcomes will be assessed through on-line work in ALEKS, written exercises, and Module Tests.

Course Design
This course is designed to help you work through critical mathematical concepts that are needed for college level mathematics classes. Your instructor and TAs are here to help you work through any difficulties you encounter, and the online learning supplement will also act as your personal tutor. This course is designed for YOUR SUCCESS. Please read through the information below to learn more about how the course is structured and what the expectations will be.

ALEKS: (See the “ALEKS INFORMATION” file found on Blackboard for steps for signing up.) You will start the course with an initial knowledge check in ALEKS, the online learning supplement you will use throughout the semester. ALEKS stands for Assessment and Learning in Knowledge Spaces and is a research-based tool that has been used successfully to facilitate student learning for over 25 years. It has a rich supply of built-in resources such as written explanations, worked out examples, and often video clips explaining certain concepts. You will start with a brief tutorial to show you how the tool works and how to enter answers. ALEKS is an artificial intelligence system that utilizes adaptive learning. In order for the program to help you work on topics in math that YOU need to master, you will do the initial knowledge check in ALEKS. In 25-30 questions it is able to determine what you know from the material covered in the course. This establishes your base knowledge so that ALEKS knows what mathematical tools you already have mastered and what you are ready to learn. It is very important that you take this initial knowledge check seriously and try to do well, but do not use any external resources or it will not work to your advantage. Once you finish the knowledge check you will begin work in the ALEKS Modules.

To access the modules, you will see a path. Follow it to start with Module 1 objectives. Once you complete those you will have access to Module 2 and so forth. You will start working on topics within that module by selecting from the available topics. You will never be given a problem (outside of a Knowledge Check) for which you do not already have the prerequisite knowledge needed to learn that topic. Continue working through the topics until you complete 100% of the module. You can check your progress by clicking on “Gradebook,” found in the menu. Calculators may only be used when the ALEKS calculator is provided. Otherwise they should only be used to check an answer, but not to determine the answer initially. Checking your answers is highly encouraged. But using a calculator to find the answer to begin with is cheating.
Course Notes: Once you complete a module in ALEKS, you will go to your Course Notes packet and read the material on that module. Inside this material, you will find the “You Try” problems. You will work through these first on separate notebook paper. (See the Guidelines for the written exercises below.) Next, at the end of each module is a set of exercises. After the You Try’s, you will work through these exercises. Show all of your work and get in the habit of working neatly and in an organized manner. Calculators are not to be used on the written exercises, except to check an answer, which is highly encouraged. Don’t use it to cheat. Problems that have correct answers, but don’t have enough supporting work will always be marked for a re-do. The written practice will help you learn to organize and communicate your work and will reinforce the learning you are doing through ALEKS. After you complete these exercises, you will turn in the written exercises to your instructor (or TA) to grade. Your instructor/TA will mark any incorrect problems and help you work through any misconceptions you still have. You will then re-write the problems you missed and submit those “corrections” for re-grading. Once your instructor feels that you have mastered the material based on your written work, you may take your module test. (Again, follow the Guidelines found below to make sure you are doing everything correctly.)

Module Tests: Once all of the required ALEKS and written exercises are done at the required level for a module, you are eligible to take the test for that module. Module tests typically will be given the next class day after you have completed both the ALEKS work (at 100%) and the written practice to your instructor’s satisfaction. Calculators are not used on module tests, not even to check answers.

The required mastery level is 85% on the test. If you do not earn 85% or higher on the test, an additional worksheet will be required to be completed before a re-test. The module test may be repeated up to 2 times.

Grading: To receive an S (satisfactory) in the course, you must complete all 10 modules (ALEKS modules, written exercises and module tests). To pass the course, all ten ALEKS modules must be completed at 100%, written exercises must be at 100% and eight of the ten tests must be completed with a score of 85% or better and the remaining 2 must be completed with a test score of 50% or better. To be eligible for using a test score of at least 50% but less than 85%, you must attempt all three exams for that module. The 8 completed at a mastery level of 85% must include the module on fractions (Module 3) since that is a critical competency. Students who meet the criteria above will receive an S in the course and will be prepared for Math 103.

Weekly Schedule: This is an individualized class since each student will have a different background on the topics to master, but in order to complete the required modules at the mastery level needed to pass the course, you are required to work at a steady pace throughout the semester. Each student will have different strengths and different weaknesses and material that is difficult for one student may be easier for another student. You will each have to make adjustments based on your own learning style and baseline knowledge. The course schedule represents a pace for making normal progress and completing the material by the end of the semester. Some people will be able to move faster than the schedule and you are encouraged to do so. If you are able to work at a faster pace, you could complete the course BEFORE the end of the semester. Please see the weekly schedule with important details such as the last day to start testing in each module and module completion deadlines. Missing a deadline will result in automatically failing the course, with only two exceptions. Once you have missed two deadlines, primary or secondary, you will automatically fail the course when you miss your third deadline.

Attendance Policy Relating to Deadlines: This is an individualized class, but you are expected to attend class every day and to make progress at least at the pace specified on the course schedule. The main reason students fail this class is that they miss too many classes, fall behind, then realize too late that they have not left themselves enough time to learn the material required to successfully complete the class. To address this situation, we have implemented a policy stating that you must start testing in a given module by a specified date. There are ten dates, one for each module. There are also four secondary deadlines, which only apply if you did not achieve a score of 85% or better on the first test for a given module, or if you have not started testing on a module by the primary deadline. These deadlines require all extra worksheets and re-testing be completed by the specified dates. As stated above, missing more than two deadlines translates into automatically failing the course. All of the dates for the different deadlines can be found on the course schedule.
Attendance Policy Relating to Office hours: Another issue is that some students begin to get in the habit of missing class and attending their instructor’s office hours instead. This is exactly what a student should do when they are forced to miss a class, if they are very ill for example. But this should only happen once or twice for the entire semester. Students who do this too often are not using the structure of the course to their advantage and are putting unnecessary strain on their instructor, who has limited time each week to hold office hours. In order to combat this, a student’s ability to get help from their instructor during office hours will be affected the more the student skips class:

- **After missing 4 class periods:** This student may still attend office hours to get help with ALEKS, their written exercises, or worksheets needed for retaking a test. But they forfeit the ability to take the module tests during office hours. This student must now attend their regular class period to take any module tests.

- **After missing 6 class periods:** This student is no longer eligible to get any help from their instructor during office hours at all. You must now attend class to make any progress. You will need to work extremely hard to avoid missing any deadlines.

Do not miss class unless you **absolutely** have to!

Students with Disabilities: Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center.

WSU Safety Measures: Washington State University is committed to maintaining a safe environment for its faculty, staff, and students. Please visit [http://safetyplan.wsu.edu](http://safetyplan.wsu.edu) and [http://oem.wsu.edu/emergencies](http://oem.wsu.edu/emergencies) to access the Campus Safety Plan and emergency information. Classroom and campus safety are of paramount importance at Washington State University, and are the shared responsibility of the entire campus population. WSU urges students to follow the “Alert, Assess, Act,” protocol for all types of emergencies and the “Run, Hide, Fight” response for an active shooter incident. Remain ALERT (through direct observation or emergency notification), ASSESS your specific situation, and ACT in the most appropriate way to assure your own safety (and the safety of others if you are able). Please sign up for emergency alerts on your account at MyWSU. For more information on this subject, campus safety, and related topics, please view the FBI’s Run, Hide, Fight video and visit the WSU safety portal.

Academic Integrity: Academic integrity is the cornerstone of higher education. As such, all members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. Academic integrity will be strongly enforced in this course. Students who violate WSU’s Academic Integrity Policy (identified in Washington Administrative Code (WAC) 504-26-010(3) and -404) will receive a zero on the assignment, will not have the option to withdraw from the course pending an appeal, and will be reported to the Office of Student Conduct. Cheating includes, but is not limited to, plagiarism and unauthorized collaboration as defined in the Standards of Conduct for Students, WAC 504-26-010(3). You need to read and understand all of the definitions of cheating: [http://app.leg.wa.gov/WAC/default.aspx?cite=504-26-010](http://app.leg.wa.gov/WAC/default.aspx?cite=504-26-010). If you have any questions about what is and is not allowed in this course, you should ask course instructors before proceeding. If you wish to appeal a faculty member’s decision relating to academic integrity, please use the form available at conduct.wsu.edu.

Study Assistance: We are here to help you succeed. Please make regular use of available resources including

- my office hours
- the Math Learning Center (Cleveland 130) which is open Sunday 4pm to 9pm, Monday thru Thursday from 10am - 9pm and Friday from 10am - 5pm starting when classes begin for the semester

You are also encouraged to form study groups with others in the class. **Read and use the Course Notes.** As you will see below, you will be required to attempt all of the You-Try problems and check your answers. As soon as you find you are getting stuck or don’t feel you are understanding some material fully, seek out help from your instructor, your TA, or a tutor immediately. If you need more individualized assistance than you are finding in the Math Learning Center (MLC), private tutors are available for a fee and a list can be found at the front desk in the MLC. However, the objective is for you to learn the material covered in this course thoroughly, so do not become dependent upon a private tutor.
Math 100 Module Exercises Guidelines

1. You are expected to submit university level work.
2. Submit your module exercises on 8 ½” x 11” paper.
3. Please remove jagged edges.
4. Staple all loose pages together.
5. Please write clearly and legibly.
6. Write out the original statement of each problem and then all of the steps involved in completing it. Answers without supporting work (even if they are correct) will most likely be marked for you to re-do.
7. Put a \textbf{BOX} around your final answer.
8. At the top of your page, write the following information.
   (i) Your name
   (ii) Math 100 – Section #3
   (iii) Your instructor’s name (William Hall)
   (iv) Module # (i.e. Mod #1, Mod #2, etc.)
   \textbf{(v)} \textbf{Label with “Corrections” when you are re-submitting some of the problems}
9. At the beginning of your page, work through all of the You Try problems first, showing all your work. \textbf{Then copy the “Solutions to You Try Problems” and compare your answers.} Only after completing all of the You-Try problems, and your answers match the You Try solutions, may you begin to work on the regular module exercises. If your answers do not match the You Try Solutions, you should ask your instructor, the class TA, or a tutor for help before starting the actual exercises!
   a. Draw a horizontal line across your page (or use some other obvious break) to indicate where the You Try problems end and the regular exercises begin.
   b. Your instructor will not accept your module exercises if you try to submit them without showing that you understand the You Try problems first.