All times are in ET. **Cost of course materials highlighted in yellow.**

Math 122-3 week
Quantitative Skills and Reasoning
Maymester 2025 (3 credits)

Required Materials:

1) ALEKS access code: The student can purchase the access code through the course website or from the campus bookstore. **Cost of ALEKS access code through the ALEKS website-$30**
2) Working computer with webcam, speakers & microphone: These are required for exams. Additionally students will need to test their internet connection prior to exams. If the internet connection does not meet the Examity requirements the student will not be able to take the exam.
3) Examity is an online proctoring service for your exams. This will cost approximately per exam. You will have two exams. **Approximate cost of 2 exams-$55**

Catalog Description: An introductory study of quantitative and reasoning skills needed for success in science, technology, engineering, and mathematics.

Prerequisite: Enrollment is restricted to students who have an ACT/SAT Math or equivalent assessment score within the range specified on the WVU Eberly College Placement Chart.

Course Overview: This course is a review of quantitative skills, including the arithmetic and algebra needed for science, technology, engineering and mathematics related disciplines and as a prerequisite for higher-level mathematics courses. **Students in majors that do not require college algebra or calculus should consider MATH 121 or STAT 111 instead.**

Expected Learning outcomes:
Upon successful completion of Math 122, students will be able to:

- Perform basic arithmetic operations with integers, rational and real numbers including multiplication, division, addition and subtraction
- Perform basic operations using exponential, logarithmic and radical expressions
- Interpret word problems and examples and develop numerical representations of the quantities being expressed
- Perform basic algebraic analyses using expressions involving unknown quantities
- Perform operations with linear, quadratic and higher order polynomial expressions including rational expressions to solve for unknowns
- Interpret word problems and examples and develop algebraic representations of the quantities being expressed

In addition to the learning outcomes, courses under the Institute for Math Learning at WVU share a common set of goals. They include:

- CONCEPTUAL UNDERSTANDING: rather than just rote memorization of algorithms
- MULTIPLE APPROACHES: to examine problems from analytical, geometric and numeric perspectives, to make judgments about the appropriateness of the choice of formal or approximate methods of solution
- TECHNOLOGY AS A TOOL: use technology as an integral part of the process of formulation, solution, and communication, to gain experience in selecting the proper tool for a given problem

- ACTIVE STUDENT LEARNING: to engage in the exploration and discovery of concepts and to learn to work cooperatively to solve problems
- COMMUNICATION OF IDEAS: to demonstrate understanding by explaining in written or oral form the meanings and applications of concepts
- PROBLEM SOLVING: gain experience as a problem solver, to analyze problems in an organized manner
- APPLICATIONS: use mathematics to model and solve problems

Calculator policy: Students are permitted to use the calculator when provided in the course learning platform. No handheld calculators are permitted.

Evaluation: Students are expected to adhere to the WVU standards of academic integrity for all assignments.

Exams**:** Two exams will be given during the summer semester.

Exam	**Date**	**% Final Grade**
Initial Assessment	**Due July 17th by 11:59 pm ET**	
Midterm	**Due May 21st by 11:59 pm ET**	20%
Final Exam	**Due May 30th by 11:59 pm ET**	40%

Objective Goal Average: **20% of the final grade.** Students are expected to complete multiple objective assignments each week. Consider these your weekly homework. **They have a due date and the score you receive on the due date will not change.** You may work ahead to complete future objectives early, but keep in mind that your goal is mastery and this must be demonstrated on quizzes and exams. See the course schedule for specific due dates.Students can track objective goal progress and grades in ALEKS. All homework assignments must be submitted by their specified due dates. The due dates for these activities are outlined in the course schedule.

Pie Mastery: **20% of the final grade.**Students will work to complete their ALEKS pie throughout the course. Pie mastery is demonstrated through both scheduled knowledge checks (exams) and periodic knowledge checks. Students can track their pie progress and grade in ALEKS. The due dates for these activities are outlined in the course schedule.

Knowledge checks will be assigned periodically. These knowledge checks are practice for your exams so take them seriously. Students may use the calculator in ALEKS, when it is provided. No handheld calculators are permitted.

You will demonstrate mastery on topics through knowledge checks given throughout the semester. These knowledge checks will help to increase your pie progress grade throughout the semester. Knowledge checks are practice for your exams and should be treated as such. **Do not use notes or additional resources that you cannot use on exams.**

ALEKS uses adaptive technology. Using aids (Mathway, apps, google, other people, etc.) to complete your topics and knowledge checks, will penalize you when you take the test. You MUST be able to demonstrate mastery in order to keep the topics in your pie.

Missed Assignment Policy: If you have a catastrophic event that will prohibit you from completing your work please contact your instructor immediately.

Proctoring: Online proctoring will be done through the online proctoring service, Examity. *Students may need to run multiple internet speed, camera and microphone checks to ensure that they will not have issues on exam days*. Instructions for setting up Examity can be found on eCampus.

For the initial assessment students will use the Respondus Lockdown Browser with Monitor (https://www.aleks.com/support/lockdown_system_requirements).

Grading Scale:
Standard rules of rounding and significant figures apply. This grading scale may be lowered, but students earning these course percentages will be guaranteed these letter grades. **Students cannot register for Math 124/104 or Math 126/106 without a C or higher in the course.**

A	90 - 100%
B	80 - 89%
C	70 - 79%
D	60 - 69%
F	<60%

Grades are updated often in eCampus and ALEKS, however eCampus will be the official grade for the course.

Please visit the following links for more information on Institutional Policies:
Students are responsible for reviewing policies on inclusivity, academic integrity, incompletes, sale of course materials, sexual misconduct, adverse weather, as well as student evaluation of instruction, and days of special concern/religious holiday statements.

https://tlcommons.wvu.edu/syllabus-policies-and-statements