DAVIS UNIVERSITY

# COURSE SYLLABUS

# MTH102: INTRODUCTORY ALGEBRA I

# SUMMER QUARTER 2025

**QUARTER:** SUMMER QUARTER 2025

**COURSE SYLLABUS FOR:** MTH102 Introductory Algebra I

**CREDIT HOURS:** 5 CREDITS

**INSTRUCTOR:**

**INSTRUCTOR EMAIL:**

**INSTRUCTOR OFFICE HOURS:**

**COURSE DESCRIPTION:** This course is an introduction to algebra. The content will cover the study of integers, the solution of equations with one and two unknown variables and coordinate graphing. Application problems are used extensively throughout the course.

**TEXT:** Introductory Algebra, 9th edition, by: Aufmann and Lockwood. ISBN: 9781133365433.

**EXPECTED LEARNER OUTCOMES:**

1. Familiar with the order of operations agreement
2. Solve equations with one and two unknowns.
3. Translate a verbal expression into a mathematical one/two unknow variable and then solve it.
4. Analyze and organize information and solve application problems.
5. Graph linear equation in two variables, using the rectangular coordinate system.

**LATE WORK POLICY:** All students are expected to submit homework assignments electronically on the date specified on the syllabus No late homework will be accepted and the student will receive a "0" (zero) for the homework assignment. Should the student refuse to complete the assigned work for the class, it could result in the student failing the class. All work assigned is expected to be completed on the date assigned. The instructor reserves the right to alter the schedule as necessary. Please be sure to check your email/Moodle for any changes to the schedule.

**PLAGIARISM AND COPYRIGHT INFRINGEMENT POLICY:** Work that is found to be plagiarized receives a grade of zero and often causes a student to fail a class. Documentation of plagiarism is added to the student's academic file as a violation of accepted student conduct and is subject to disciplinary action. Plagiarism is the use of another person's exact words, or their ideas written in the student's words without giving the original author credit.

Plagiarism can result from any of the following:

- Quote material directly without using quotation marks.
- Paraphrase the original so that many of the phrases are the same as the original. A good rule is no more than 3 or 4 words in a row should be the same as the original.
- Copy the original sentence pattern, substitution synonyms for key words.
- Neglect to indicate the source of the original material.

**ASSESSMENTS:**

| Content | |
|---|---|
| Midterm exam | 30% |
| Homework | 10% |
| Quizzes | 30% |
| Final exam | 30% |
| Total | 100% |

**COURSE GRADE:** **A = 93%-100%**

**B = 85%-92%**

**C = 77%-84%**

**D = 70%-76%**

**F = below 70%**

**TENTATIVE CLASS SCHEDULE:**

**(Subject to change)**

| Week | Content Covered | Assignments & Assessment Due |
|---|---|---|
| **Week 1:** | 1.1. Introduction to Integers<br>1.2. Addition and Subtraction of Integers<br>1.3. Multiplication and Division of Integers<br>1.4. Exponents and the Order of Operations<br>1.5. Factoring Numbers and Prime Factorization<br>1.6. Addition and Subtraction of Rational Numbers | |
| **Week 2:** | 1.7. Multiplication and Division of Rational Numbers<br>1.8. Concepts from Geometry<br>2.1. Evaluating Variable Expressions<br>2.2. Simplifying Variable Expressions<br>2.3. Translating Verbal Expressions into Variable Expressions | |
| **Week 3:** | 3.1. Introduction to Equations<br>3.2. The Basic Percent Equation and the Uniform Motion Equation<br>3.3. General Equations—Part I<br>3.4. General Equations—Part II<br>3.5. Translating Sentences into Equations | Midterm Exam-Friday |
| **Week 4:** | 3.6. Geometry Problems<br>3.7. Mixture and Uniform Motion Problems<br>7.1. The Rectangular Coordinate System<br>7.2. Linear Equations in Two Variables<br>7.3. Intercepts and Slopes of Straight Lines | |
| **Week 5:** | 7.4. Equations of Straight Lines<br>8.1. Solving Systems of Linear Equations by Graphing<br>8.2. Solving Systems of Linear Equations by the Substitution Method<br>8.3. Solving Systems of Linear Equations by the Addition Method<br>8.4. Application Problems in Two Variables | Final Exam-Friday |