

**Naugatuck Valley Community College**  
**STEM Division**  
**Science, Technology, Engineering and Mathematics**

**Common Course Syllabus**  
**Prealgebra MAT\*H073**

**COURSE TITLE:** Prealgebra – Number Sense, MAT\*H073

**COURSE DESCRIPTION:** Material is chosen to provide the student with current mathematical concepts and topics needed to continue work in algebra, the mathematics of business, science and basic technology. Topics covered include computation with whole numbers, fractions, decimals, ratios, proportions, percents, and measures. Geometry topics are integrated throughout. Signed number computation, algebraic expressions, and equation solving appear regularly, thus familiarizing the students with algebraic concepts. Emphasis is on understanding of mathematical concepts and problem solving techniques. Instruction in calculator use is emphasized along with related applications.

**NUMBER OF CREDITS:** 4 credit hours. This course will not fulfill a mathematics requirement in any degree program.

**PREREQUISITE:** Placement in this course is determined by a college placement exam.

**TECHNOLOGY:** Computer component required. Scientific calculator required; graphing calculator (TI-83 (Plus) or TI-84 (Plus)) is not required but is recommended if the student is interested in purchasing a calculator.

**COURSE OBJECTIVES:**

1. Develop and apply the fundamental skills of basic arithmetic.
2. Acquire skills required for placement into introductory algebra.
3. Develop problem-solving skills and recognize that algebra can be used to model real world situations.
4. Become active participants in the learning process.

**LEARNING OUTCOMES:** At the end of this course the student will be able to do the following:

- A. Whole numbers —
  1. Recognize and perform operations of addition, subtraction, multiplication, division, rounding, and estimation.
  2. Write and evaluate exponential notation.
  3. Simplify square roots of perfect squares and approximate square roots.
  4. Apply rules for order of operations.
  5. Solve equations and apply skills to geometric and other types of applications.

- B. Integers —
1. Recognize and perform operations of addition, subtraction, multiplication, and division.
  2. Evaluate expressions using the rules of order of operations.
  3. Solve equations and apply skills to applications.
- C. Common Fractions and Decimals —
1. Perform operations of addition, subtraction, multiplication, division, and estimation.
  2. Solve equations and apply skills to applications.
- D. Calculator —
1. Perform basic arithmetic.
  2. Perform computations involved in algebraic applications.
- E. Ratios, Rates, and Proportions —
1. Identify ratios and rates.
  2. Solve proportions.
  3. Work on applications including converting units of measurement.
- F. Percent —
1. Demonstrate understanding of basic concept of percent.
  2. Solve percent equations and apply skills to applications.
- G. Algebraic Expressions and Equations —
1. Demonstrate understanding of the concept of variables.
  2. Evaluate algebraic expressions.
  3. Combine like terms.
  4. Solve equations and apply skills to applications.
- H. As time permits, the student may be introduced to reading and interpretation of graphs.

**GRADING SYSTEM:**

For the purpose of computing numerical credit point averages, grades are evaluated as follows for each semester hour of credit. Grades on exams, papers, and quizzes, will be based on this grading system.

Numeric Grade	Acceptable Letter Grade Range to be used by the instructor	Description
90 – 100	A– to A	Excellent
80 – 89	B–, B, B+	Above Average
70 – 79	C–, C, C+	Average
60 – 69	D–, D, D+	Below Average
Below 60	F	Failing

**CLASS CANCELLATION PROCEDURE:** *If the instructor is late, the class is expected to wait 15 minutes before leaving or until informed of a cancellation by a college official. Information on weather related closings/late openings concerning Naugatuck Valley Community College can be obtained through local radio and television stations, or via the college website (<http://www.nvcc.commnet.edu>). NOTE: An alternative assignment may be given if classes are canceled due to weather.*

**ACADEMIC HONESTY STATEMENT:** *At NVCC we expect the highest standards of academic honesty. Academic dishonesty is prohibited in accordance with the Board of Trustee's Proscribed Conduct Policy in Section 5.2.1 of the BOT Policy Manual. This policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism, and other proscribed activities. Plagiarism is defined as the use of another's idea(s) or phrase(s) and representing that/those idea(s) as your own, either intentionally or unintentionally. Anyone who is caught cheating on exams, plagiarizing another's work or published material will fail the course regardless of progress made in the course.*

**CHILDREN ON CAMPUS:** *With permission of the instructor only – Children must be attended at all times by a responsible adult. The student must notify the instructor or supervisor prior to the beginning of the class or activity that a child is present. Instructors and/or supervisors are authorized to ask the student or program participants to leave should the presence of a child be disruptive.*

**CELL PHONE/PAGER USE POLICY:** *Students are hereby notified that cellular phones and beepers are allowed in class only if they are turned off or turned to a silent mode. Under no circumstances are telephones to be answered in class. Students who ignore this policy may be asked to leave class. When there are extenuating circumstances that require that a student be available by phone or beeper, the student should speak to the instructor prior to class, so that together they can arrive at an agreement concerning the device.*

**STUDENTS WITH SPECIAL NEEDS:** *Students who may require accommodations on the basis of a learning disability are encouraged to contact the Coordinator of Learning Disabilities. Students who may require accommodations on the basis of all other disabilities should contact the Coordinator of Disability Services. After providing documentation and completing the disability disclosure process, students are then encouraged to meet with their instructor(s) to discuss the accommodations approved by the appropriate Coordinator and to complete the Accommodations Agreement form. Accommodations are not retroactive, students are therefore encouraged to meet with their instructor(s) at the beginning of each semester. Instructors, in conjunction with appropriate college personnel, will provide assistance and/or accommodations only to those students who have completed the disability disclosure and accommodations process.*