

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

**Common Course Syllabus**  
**Applications for Business and Other Careers MAT\*H121**

**COURSE TITLE:** Applications for Business and Other Careers, MAT\*H121

**COURSE DESCRIPTION:** Enrollment in Math 121 is restricted to students in Automotive Technician, Office Administrative Careers, Early Childhood Education, Hospitality Management, Landscaping and Horticulture programs. Topics covered include a review of basic arithmetic and algebraic operations, statistics, graphs, and tables. This course emphasizes specific mathematical applications for each discipline.

**NUMBER OF CREDITS:** 3 credit hours. This course will not satisfy the General Education Mathematics requirement at Connecticut State Universities.

**PREREQUISITE:** Grade of "C" or better in MAT\*H095 (Elementary Algebra) or an appropriate score on a college placement exam.

**COURSE OBJECTIVES:**

1. Apply arithmetic and elementary algebra skills to applications common in business, consumer math, and personal finance.
2. Interpret tables and graphs.
3. Develop problem-solving skills.
4. Participate actively in the learning process while becoming exposed to current business situations and techniques.

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

- A. Basic Arithmetic and Algebra —
  1. Perform operations of addition, subtraction, multiplication, division, and exponentiation on rational numbers.
  2. Convert between fractions, decimals and percents.
  3. Convert within the metric system and between metric and English units.
  4. Evaluate algebraic expressions utilizing rules for order of operations.
  5. Solve linear equations.
- B. Applications of Business Mathematics —
  1. Reconcile checking account records.
  2. Calculate wages and payroll.
  3. Calculate discounts and determine best time to pay discounted bills.
  4. Determine markups, markdowns, and rates.
  5. Solve simple interest problems.
  6. Determine finance charges and annual percentage rate on installment loans.
  7. Find interest and balances on credit card accounts.
  8. Determine compound interest, effective rates, and present value.
  9. Solve problems involving annuities, sinking funds, and stocks and bonds.
  10. Solve problems involving mortgages.
  11. Calculate inventory values.

12. Construct a depreciation schedule.
13. Calculate income taxes, sales taxes, and property taxes.
14. Determine insurance premiums.
15. Determine measures of central tendency.
16. Interpret tables and 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.*