## MATH 140: College Algebra with Applications 4 credits

**Goal:** To learn some fundamental concepts of algebra and ways to apply those concepts to model the "real world" and solve real problems that face our society.

Text: **Mathematics in Action**, by The Consortium for Foundation Mathematics Technology: A graphing calculator is required. The **TI-83** or **TI-83 Plus** is recommended.

## **Course Outline**

- 1 [3 weeks] The concept of function and linear functions. Chapter 1 of text
- 2 [3 weeks] The algebra of function, including operations and their inverses Chapter 2 of text
- 3. [4 weeks] Exponential and logarithmic functions Chapter 3 of text
- 4 [4 weeks] Quadratic functions and other polynomials Chapter 4 of text

**Homework:** For every lesson, problems will be assigned that you will either discuss or hand in. Class will proceed on the assumption that you have done and understood these problems. You are responsible for asking questions, and these should be based on your own serious efforts to solve the problems. Visit me in office hours if you find you have additional questions not fully answered during class. Assistance is also available from math tutors in the Freshman Center.

All assignments must be submitted on time.

**Quizzes:** There will be frequent quizzes, often in the first 15 minutes of class. Missed quizzes cannot be made up. Your 2 lowest quiz grades will be dropped at the end of the semester.

**Project:** A long-term group project must be completed by each student. The purpose of the project is to apply some mathematics to real problems that relate to your lives or to the environment of small islands in the Caribbean. Failure to complete the project will result, at best, in a grade of "incomplete" for the course.

**Exams:** There will be three hour-exams and a Final Exam

Excuses for missed exams will not be accepted unless accompanied by a doctor's note or similar official document.

## **Grading**:

Points will be assigned on the following basis:

Homework/Classwork	150
Quizzes	150
Project	150
Tests	300
Final	250
То	tal 1000

**Attendance requirement:** Attendance will be recorded. No points are awarded for attendance, but you will be penalized for excessive absence or tardiness (more than 3 absences is excessive.) The minimum penalty is a +/- to your final grade; the maximum penalty is a full letter grade.

**Academic integrity:** No collaboration is permitted on quizzes and examinations. Please refer to UVI's student handbook for the policy on academic honesty, and remember that no grade is worth the sacrifice of your academic reputation.