Objective: The learner will be able to analyze and graph algebraic expressions, especially conic sections. Also, the learner will gain an understanding of essential concepts including limits, derivatives, integrals. Techniques for differentiation and integration will be thoroughly explored and applied to practical problems in physics and electrical engineering.

Required Materials: In addition to the required text, a student solutions manual is suggested and is available in the book store on campus. A scientific calculator is required, as is a ruler (or other straightedge) and ¼” square graph paper. In addition to these, standard required materials include an organized notebook, folder, pencils, etc.

Course Overview: This course will be primarily lecture format, with occasional small-group activities, and use of TI-92 calculus-ready graphing capabilities. The topics covered are divided into five basic units. At the beginning of each unit, I will provide an approximate calendar of topics for that unit. Each unit will conclude with an opportunity for you to demonstrate your understanding on a written exam.

Attendance: Attendance for the course is expected for every class session. If you must miss class for some reason, make sure to do all assigned homework problems so that you have an understanding of the topics covered during that session. Attendance on test days is equally critical. Make-up tests will only be given under very unusual circumstances, and may incur a 20% per-day deduction if not taken in advance.

Course Grading: Final grades for the course will be composed and calculated as follows:

- Unit tests (5): 75% 92-100% A
- Homework: 25% 83-91% B
- 74-82% C
- 65-73% D
- Below 65% F

I reserve the right to adjust assigned letter grades by up to 3% according to other factors including class participation, attendance, and professionalism.
**Exams:** The five written exams will require that you demonstrate an understanding of the topics of the course. Questions on the exams will be closely related to and apply concepts from problems explored in class or on homework assignments.

**Homework:** Homework assignments will be given daily. Most problems on each assignment will not be collected, and are for your practice. Specific problems within many assignments will be collected for credit. These problems should be done thoroughly and neatly. Working with others on homework assignments is encouraged, but only if it enhances your personal understanding of the topic. While a limited amount of time at the beginning of each class will be arranged for discussion of homework problems, I strongly encourage you to stop by with individual questions before class.

**General Policies and Expectations:**

1) No food or tobacco products are allowed in class at any time. If you choose to have water, soda or juice in class, it must be in a container with a cap.

2) Cell phones and pagers must be turned off prior to class.

3) Students must supply all course materials outlined on the syllabus.

4) Any cheating can result in immediate failure of the course, along with any repercussions imposed by WWTC.

5) All coursework must be done neatly (preferably in pencil) to be accepted.

**Homework Assignment 1:**

After you have reviewed both the course syllabus and the list of expectations above, please e-mail me at rouvelj@wwtc.edu to confirm your understanding.

*I strongly encourage you to seek help on any topic as soon as a problem arises. Help is available in the Math Lab C229, or from me during my office hours. Any student with special needs should talk with me about special accommodations during the first week of the course. If you have any further questions concerning the course, please feel free to contact me at any time. - J. Rouvel*