**Title: Differential Equations**

**Topic:**

This course is a special section of Math 256, taught as part of Mech 221, a first term course in Mechanical Engineering that combines 5 subjects (Math, Mech Eng, EE, Solid Mech and Materials) in one class. The course is a typical second year engineering DE course at UBC with a few differences: it does not include any discussion of Laplace Transforms, but includes several weeks on numerical methods - approximate integration and differentiation, review of Taylor Polynomial approximation then on to interpolation, numerical methods for time stepping including forward (explicit) Euler and RK methods.

The course includes seven two-hour computer labs which are done in MATLAB. An investigation and improvement of the labs is a CWSEI project begun in the Fall of 2008.