Differential Equations Project:

Select your project team: (Recommended: 4 students.)

1. Name: _____   Sec: _____

     Email: _____   Phone: _____

2. Name: _____   Sec: _____

     Email: _____   Phone: _____

3. Name: _____   Sec: _____

     Email: _____   Phone: _____

4. Name: _____   Sec: _____

     Email: _____   Phone: _____

Indicate your preference on projects: (1 for first choice down to 11 for last choice.)

_____   NSS 1C: Magnetic Dipole (Also compute and plot the exact solutions of both equations for several sets of initial conditions.)

_____   NSS 2AB: One and Two Snowplows.

_____   NSS 2D: Toricelli's Law of Fluid Flow

_____   NSS 2E: Clairaut Equations and Singular Solutions (Be sure to include plots.)

_____   NSS 3B: Aquaculture

_____   NSS 3C: Curve of Pursuit (Essentially no Maple.)

_____   NSS 4E: Nonlinear Equations Solvable by First Order Techniques (Essentially no Maple.)

_____   M 10.1: Heat-Seeking Particles

_____   M 10.3: The Tennis Serve (Add air resistence as $-kv$, but not spin.)

_____   M 10.4: Modeling Lake Pollution

_____   M 10.6: Rocket Propulsion