MATH 253:

Calculus III Project: #1 Multivariable Differentiation

Select your project team: (Recommended: 4 students.) Working Sec: _____

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 8 for last choice.)

_____ Newton's Method in 2 Dimensions (10.3) requires a Maple program

_____ Gradient Method of Finding Extrema (10.4) requires a Maple program

_____ Seeing a Blimp (10.5)

_____ The Trash Dumpster (10.6)

_____ Generalized Diameters (10.7)

_____ Locating an Apartment (10.8)

_____ Minimal Rectangles and Triangles (Stewart p. 792 \#5 + similarly w. triangles)

_____ Exact Gradient Method (Stewart p. 793 \#11 or p. 866 \#2) requires a Maple program

MATH 253:

Calculus III Project: #2 Multivariable Integration

Select your project team: (Recommended: 4 students.) Working Sec: _____

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 8 for last choice.)

_____ Gauss' Law and Ampere's Law (9.9, 9.10)

_____ Interpretation of Divergence and Curl (9.11, 9.12)

_____ Skimpy Donut (10.9)

_____ Volume Between a Surface and Its Tangent Plane (10.10)

_____ Hypervolume of a Hypersphere (10.11)

_____ Average Temperatures (10.12)

_____ Center of Mass of Planet X (10.13)

_____ Steradian Measure (10.14)