## Tentative Schedule:

| MONDAY | Wednesday | Friday |
| :---: | :---: | :---: |
| Sep 19th | 21st | 23rd <br> Vectors in the plane Section 13.1 |
| 26th <br> Vectors in three dimensions <br> Section 13.2 | 28th <br> The dot product <br> Section 13.3 | 30th <br> The cross product <br> Section 13.4 |
| Oct 3rd $\mathbf{5}$ <br> Planes in 3-space  <br> Section 13.5  | 5th <br> Parametric equations <br> Section 12.1 | 7th <br> Vector-valued functions <br> Section 14.1 |
| Calculus of vector-valued functions <br> Section 14.2 | 12th <br> Arc length, speed \& curvature <br> Sections $14.3 \& 14.4$ | 14th $\mathbf{1 0}$ <br> Motion in 3-space \& Kepler's laws  <br> Sections 14.5 \&14.6  |
| 17th <br> Midterm 1 | 19th $\mathbf{1 1}$ <br> Functions of two or more variables  <br> Section 15.1  | 21st $\mathbf{1 2}$ <br> A survey of quadratic surfaces  <br> Section 13.6  |
| 24th $\mathbf{1 3}$ <br> Limits and continuity 1  <br> Section 15.2  | 26th $\mathbf{1 4}$ <br> Limits and continuity 2  <br> Section 15.2  | 28th $\mathbf{1 5}$ <br> Partial derivatives 1  <br> Section 15.3  |
| 31st $\mathbf{1 6}$ <br> Partial derivatives 2  <br> Section 15.3  | Nov 2nd $\mathbf{1 7}$ <br> Differentiability and tangent planes 1  <br> Section 15.4  | 4th $\mathbf{1 8}$ <br> Differentiability and tangent planes 2  <br> Section 15.4  |
| 7th <br> Midterm 2 | 9th $\mathbf{1 9}$ <br> Gradient and directional derivative 1  <br> Section 15.5  | 11th <br> Veteran's Day, No class |
| 14th $\mathbf{2 0}$ <br> Gradient and directional derivative 2  <br> Section 15.5  | 16th $\mathbf{2 1}$ <br> Chain rule 1  <br> Section 15.6  | 18th $\mathbf{2 2}$ <br> Chain rule 2  <br> Section 15.6  |
| 21st $\mathbf{2 3}$ <br> Optimization 1  <br> Section 15.7  | 23rd $\mathbf{2 4}$ <br> Optimization 2  <br> Section 15.7  | 25th <br> Thanksgiving Holiday, No class |


| MONDAY | WEDNESDAY | Friday |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 28th | $\mathbf{2 5}$ | 30 th | $\mathbf{2 6}$ | Dec 2nd <br> Lagrange multipliers 1 <br> Section 15.8 |

