**Review for final exam**

Topics List:

1) Vectors: Position vectors, dot and cross products, angle between two vectors

2) Equation of a plane

3) Gradient and directional derivatives.

4) Partial derivatives.

5) Parametrization of a curve.

6) Tangent vectors

7) velocity and acceleration of motion in space.

8) Arc length of a curve given by a position vector.

9) Chain rule for partial derivatives.

10) Double and triple integrals over a region.

11) Double integrals by reversing the order of integration.

12) line integrals for regular and parametrized curves.

13) local max/ min/ saddle points.