

## Teaching Plan

There were 7 weeks from May 15 to June 26, 2017. There are 14 meetings. Two tests (1.5 hr each) take up 1 meeting so there are exactly 13 meetings for teaching. Every meeting lecture 1:30-4:15 pm, break 15 min, in-class exercise 4:30-4:50, tutorial 4:50-5:15.

- May 17 Dot product, Euclidean motions
- May 19 Cross product; planes
- May 22 Lines, quadratic surfaces
- May 24 Parametric curves, arc-length
- May 29 Graph and polar curves
- May 31 Test 1 (1.5 hr). Kepler's Law (optional)
- June 05 Open and closed sets; continuity of functions
- June 07 Partial differentiation, differentiation
- June 12 Differentiation continued, chain rule
- June 14 Gradient, directional derivatives, differentials
- June 19 Test 2 (1.5 hr). Surfaces, curves, Implicit Function Theorem
- June 21 Inverse Function Theorem; extremal problems, existence of extrema
- June 23 Unconstrained extremal problems
- June 26 Constrained extremal problems