

**MATH 206A SYLLABUS  
WINTER 2016**

**Lectures** MWF 11:00-11:50, APM 7421  
**Instructor** James M<sup>c</sup>Kernan, APM 6260, phone (858)-534-6347

**Office Hours** TBA  
or by appointment, if you cannot make these times.

**Text** TBA.

See web site for some other suggestions.

**Syllabus** Research style problems centred around the topic of symmetries of polynomials and varieties. This topic covers a large ground, ranging from the classical result of Hurwitz which states that any compact Riemann surface of genus at least  $g \geq 2$  has at most  $84(g - 1)$  automorphisms, symmetries of hypersurfaces, automorphisms of abelian varieties and automorphisms of K3 surfaces. Ideally at the end of this course students will be doing research on some problem in this area.

**Prerequisites** Math 203ABC or consent of instructor.