

Math 215C - Complex Analysis, Geometry, Topology - Spring 2014

Course Schedule

1. Week of 3/31: Duality Theorems
2. Week of 4/6: Duality Theorems with Applications, Intersection theory
3. Week of 4/13: Differential forms, exterior derivatives, de Rham cohomology.
4. Week of 4/20: Stokes' theorem, de Rham theorem, Problem Set 1 due 4/24.
5. Week of 4/27: Sard's theorem, Embedding theorems, tubular neighborhood theorem.
6. Week of 5/4: Fiber bundles, vector bundles, Thom transversality theorem. Cobordism.
7. Week of 5/11: Thom Isomorphism. Problem Set 2 due 5/15.
8. Week of 5/18: Intersection theory again.
9. Week of 5/25: Euler and Stiefel-Whitney classes.
10. Week of 6/1: Enumerative geometry, Problem Set 3 due 6/5.