

**Algebra I (Math 111A), Summer 2016, Robert Boltje,  
UCSC**

1. Prerequisites (Sets, functions, congruences)
2. Binary operations and homomorphisms
3. Groups
4. Subgroups
5. Cyclic groups
6. Symmetric groups
7. Symmetry groups
8. Cosets and Lagrange's Theorem
9. Normal subgroups and factor groups
10. Isomorphism Theorems
11. Group action on a set
12. The Sylow Theorems
13. Solvable groups
14. The structure of finite abelian groups