

MATH 6270: Theory of Groups

MWF 10:00-10:50 am, MATH 220

Peter Mayr

Mail: peter.mayr@colorado.edu

Office: Math 310

Office hours: Tuesday 10-11 am, Wednesday 3-4 pm

Course website: <http://math.colorado.edu/~mayr/teaching/math6270fall19/>

Course description: We discuss tools of group theory and their applications following this outline:

- (1) group actions, Sylow theory
- (2) decompositions
- (3) soluble and nilpotent groups
- (4) permutation groups
- (5) representations
- (6) transfer
- (7) extensions and cohomology

Assignments. Each week I will post homework problems on the course website. Please send in solutions in pdf. Please use Math 6270 - assignment n in the subject line of the mail for the n-th assignment. Additionally I will ask you to give short presentations in class

Prerequisites. MATH 6130 (Modern Algebra 1)

Text. Derek J.S. Robinson. A course in the theory of groups (graduate texts in mathematics, vol. 80) 2nd edition, 1996.

You can freely download the pdf for the book from Springer through our library.