## $\begin{array}{c} \text{Math 3140 Fall 2021 - Review for} \\ \text{Midterm 2} \end{array}$

Topics are everything covered in assignments 6-10, in particular:

- Lagrange's Theorem, cosets, index of subgroups
- conjugacy, normal subgroups, quotient groups
- Homomorphism and Correspondence Theorems
- Fundamental Theorem of Finitely Generated Abelian Groups and applications

Some additional practice problems from Goodman's book: 2.4.7, 2.4.21, 2.6.4, 2.7.11, 3.1.12, 3.6.9, 3.6.14