Algebraic Structures II

This is a second module in algebraic structures, covering group theory. There will be abstract thinking and proofs but also an emphasis on examples. The module includes the basics of group actions, finite p-groups, Sylow theorems and their applications, and the Jordan-Hölder theorem. Some of the ideas in group theory are parallel to those first encountered for rings in Algebraic Structures I.



1.

Cameron, Peter J. Introduction to algebra. vol. Oxford mathematics (Oxford University Press, 2008).

2.

Ledermann, Walter & Weir, Alan J. Introduction to group theory. vol. Longman mathematics series (Longman, 1996).