

Spring 2010 and Fall 2010 Algebra Qualifying Exam Syllabus,
corresponding to Serge Lang's Algebra (Revised Third Edition):

Groups: Ch. I (Sections 1-8)

Rings: Ch. II

Modules: Ch. III (Sections 1-6)

Polynomials: Ch. IV (Sections 1-4 and 6) Algebraic extensions of
fields: Ch. V Galois theory: Ch. VI (Sections 1-7)

Integrality: Ch. VII (Sections 1,2)

Nullstellensatz: Ch. IX (Section 1)

Noetherian rings: Ch. X (Section 1)

Linear algebra: Ch. XIII (Sections 1-4)

Basic representation theory of finite groups: Ch. XVIII (Sections 1-5)