Record Nr. UNINA9910966022203321 Autore Wickless W.J. **Titolo** A First Graduate Course in Abstract Algebra / / by W.J. Wickless Pubbl/distr/stampa Boca Raton, FL:,: CRC Press,, [2017] ©2004 **ISBN** 9786610202355 9781351989749 135198974X 9781315273228 1315273225 9781482293166 1482293161 9781482276688 1482276682 9781280202353 1280202351 9780203913666 0203913663 9780824757182 0824757181 Edizione [First edition.] Descrizione fisica 1 online resource (232 p.) Monographs and textbooks in pure and applied mathematics;; 266 Collana Disciplina 512/.02 Soggetti Algebra, Abstract Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Preface; Contents; Groups (mostly finite); Rings (mostly domains); Modules; Vector spaces; Fields and Galois theory; Topics in Noncommutative Rings: Group extensions: Topics in abelian groups: References; Index Sommario/riassunto Since abstract algebra is so important to the study of advanced

mathematics, it is critical that students have a firm grasp of its

principles and underlying theories before moving on to further study.

To accomplish this, they require a concise, accessible, user-friendly textbook that is both challenging and stimulating. A First Graduate Course in Abstract Algebra is just such a textbook. Divided into two sections, this book covers both the standard topics (groups, modules, rings, and vector spaces) associated with abstract algebra and more advanced topics such as Galois fields, noncommutative rings, group extensions, and Abelian groups. The author includes review material where needed instead of in a single chapter, giving convenient access with minimal page turning. He also provides ample examples, exercises, and problem sets to reinforce the material. This book illustrates the theory of finitely generated modules over principal ideal domains, discusses tensor products, and demonstrates the development of determinants. It also covers Sylow theory and Jordan canonical form. A First Graduate Course in Abstract Algebra is ideal for a two-semester course, providing enough examples, problems, and exercises for a deep understanding. Each of the final three chapters is logically independent and can be covered in any order, perfect for a customized syllabus.