

Librería  
*Bonilla y Asociados*  
desde 1950



**Título:** Universal Algebra. Fundamentals And Selected Topics

**Autor:** Bergmna, Clifford

**Precio:** \$1980.00

**Editorial:**

**Año:** 2012

**Tema:**

**Edición:** 1<sup>a</sup>

**Sinopsis**

**ISBN:** 9781439851296

Starting with the most basic notions, Universal Algebra: Fundamentals and Selected Topics introduces all the key elements needed to read and understand current research in this field. Based on the author's two-semester course, the text prepares students for research work by providing a solid grounding in the fundamental constructions and concepts of universal algebra and by introducing a variety of recent research topics.

The first part of the book focuses on core components, including subalgebras, congruences, lattices, direct and subdirect products, isomorphism theorems, a clone of operations, terms, free algebras, Birkhoff's theorem, and standard Maltsev conditions. The second part covers topics that demonstrate the power and breadth of the subject. The author discusses the consequences of Jónsson's lemma, finitely and nonfinitely based algebras, definable principal congruences, and the work of Foster and Pixley on primal and quasiprimal algebras. He also includes a proof of Murskii's theorem on primal algebras and presents McKenzie's characterization of directly representable varieties, which clearly shows the power of the universal algebraic toolbox. The last chapter covers the rudiments of tame congruence theory.

Throughout the text, a series of examples illustrates concepts as they are introduced and helps students understand how universal algebra sheds light on topics they have already studied, such as Abelian groups and commutative rings. Suitable for newcomers to the field, the book also includes carefully selected exercises that reinforce the concepts and push students to a deeper understanding of the theorems and techniques.