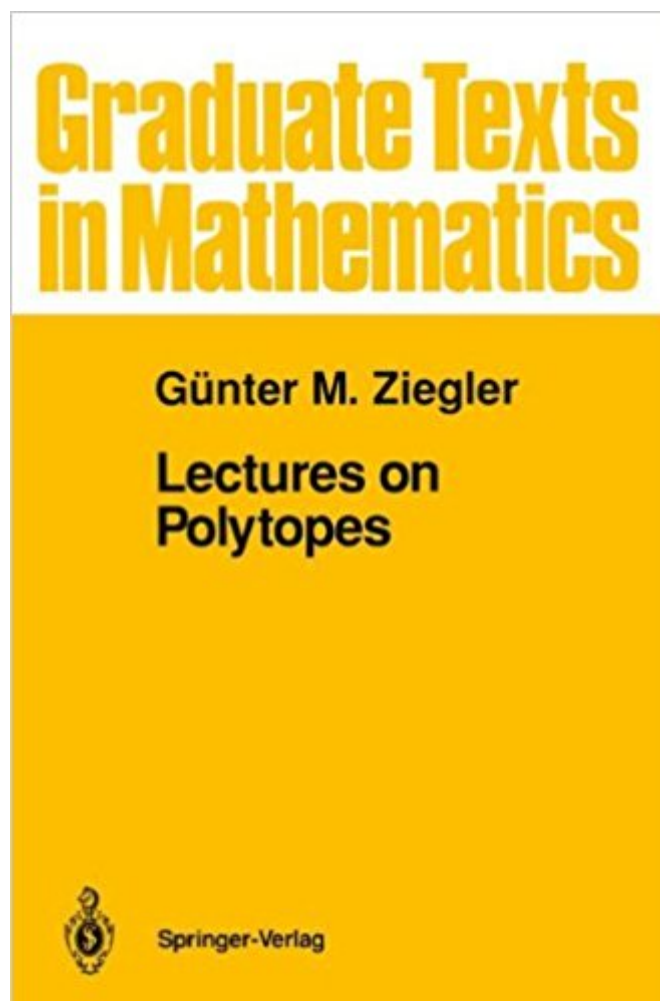


The book was found

Lectures On Polytopes (Graduate Texts In Mathematics)



Synopsis

Based on a graduate course at the Technische Universität, Berlin, these lectures present a wealth of material on the modern theory of convex polytopes. The straightforward exposition features many illustrations, and complete proofs for most theorems. With only linear algebra as a prerequisite, it takes the reader quickly from the basics to topics of recent research. The lectures introduce basic facts about polytopes, with an emphasis on methods that yield the results, discuss important examples and elegant constructions, and show the excitement of current work in the field. They will provide interesting and enjoyable reading for researchers as well as students.

Book Information

Series: Graduate Texts in Mathematics (Book 152)

Paperback: 370 pages

Publisher: Springer (May 3, 2012)

Language: English

ISBN-10: 038794365X

ISBN-13: 978-0387943657

Product Dimensions: 6.1 x 0.9 x 9.2 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: 4.7 out of 5 stars 4 customer reviews

Best Sellers Rank: #737,162 in Books (See Top 100 in Books) #127 in Books > Science & Math > Mathematics > Geometry & Topology > Algebraic Geometry #436 in Books > Textbooks > Science & Mathematics > Mathematics > Geometry #22422 in Books > Textbooks > Education

Customer Reviews

Based on a graduate course at the Technische Universität, Berlin, these lectures present a wealth of material on the modern theory of convex polytopes. The straightforward exposition features many illustrations, and complete proofs for most theorems. With only linear algebra as a prerequisite, it takes the reader quickly from the basics to topics of recent research. The lectures introduce basic facts about polytopes, with an emphasis on methods that yield the results, discuss important examples and elegant constructions, and show the excitement of current work in the field. They will provide interesting and enjoyable reading for researchers as well as students.

Honestly haven't been this excited for a book since Harry Potter came out even though this book was written a while back. It came in perfect condition and within minutes of receiving it I was

engrossed. Can't wait to read this to my child.

This book is very clearly an introduction, and does not cover the more advanced topics (for that, see the books by Richter-Gebert, Sturmfels, Stanley). Nor does it cover the major application area of the field (linear programming), which is a shame, since much of the subject does not seem to be very motivated without it. Indeed, even the major connected area in pure mathematics (toric varieties) is not touched on. Even in the subjects he does cover, he does not try to dive very deeply (for example, in the (excellent) section on Steinitz' theorem, he does not prove the contractibility of the realization space). So, the author picks his battles, and wins the ones he picks. As the other reviewer has mentioned, the bibliography is excellent. So, I would have given the book 4.5 stars if that were possible, with a penalty for motivation (or lack thereof).

If you are browsing around for a recent advanced text on modern polytope theory, this is it. Ziegler is very clear, comprehensive, and provides hundreds of references.

* Minimal prerequisite.* Readable from any place. I found quickly things I was looking for and now ready to read something more advanced.

[Download to continue reading...](#)

Lectures on Polytopes (Graduate Texts in Mathematics) Lectures on Discrete Geometry (Graduate Texts in Mathematics) The Visual Guide To Extra Dimensions: Visualizing The Fourth Dimension, Higher-Dimensional Polytopes, And Curved Hypersurfaces Graph Theory (Graduate Texts in Mathematics) Algebraic Graph Theory (Graduate Texts in Mathematics) Matroid Theory (Oxford Graduate Texts in Mathematics) Modern Geometry • Methods and Applications: Part I: The Geometry of Surfaces, Transformation Groups, and Fields (Graduate Texts in Mathematics) (Pt. 1) Functions of One Complex Variable II (Graduate Texts in Mathematics, Vol. 159) Riemann Surfaces (Oxford Graduate Texts in Mathematics) Commutative Algebra: with a View Toward Algebraic Geometry (Graduate Texts in Mathematics) The Arithmetic of Elliptic Curves (Graduate Texts in Mathematics) Differential Geometry: Connections, Curvature, and Characteristic Classes (Graduate Texts in Mathematics) Algebraic Geometry (Graduate Texts in Mathematics) Categories for the Working Mathematician (Graduate Texts in Mathematics) Algebraic Geometry: A First Course (Graduate Texts in Mathematics) (v. 133) Introduction to Elliptic Curves and Modular Forms (Graduate Texts in Mathematics) Matrices: Theory and Applications (Graduate Texts in Mathematics) Deformation Theory (Graduate Texts in Mathematics) An Introduction to Ergodic

Theory (Graduate Texts in Mathematics) The Geometry of Schemes (Graduate Texts in Mathematics)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)