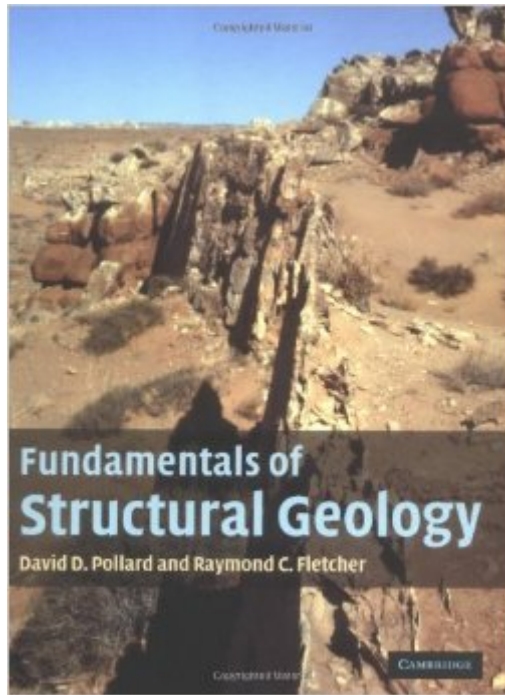


The book was found

Fundamentals Of Structural Geology



Synopsis

Fundamentals of Structural Geology provides a new framework for the investigation of geological structures by integrating field mapping and mechanical analysis. Assuming a basic knowledge of physical geology, introductory calculus and physics, it emphasizes the observational data, modern mapping technology, principles of continuum mechanics, and the mathematical and computational skills, necessary to quantitatively map, describe, model, and explain deformation in Earth's lithosphere. By starting from the fundamental conservation laws of mass and momentum, the constitutive laws of material behavior, and the kinematic relationships for strain and rate of deformation, the authors demonstrate the relevance of solid and fluid mechanics to structural geology. This book offers a modern quantitative approach to structural geology for advanced students and researchers in structural geology and tectonics. It is supported by a website hosting images from the book, additional colour images, student exercises and MATLAB scripts. Solutions to the exercises are available to instructors.

Book Information

Hardcover: 514 pages

Publisher: Cambridge University Press; 1 edition (September 19, 2005)

Language: English

ISBN-10: 0521839270

ISBN-13: 978-0521839273

Product Dimensions: 7.4 x 1.1 x 9.7 inches

Shipping Weight: 2.8 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars [See all reviews](#) (3 customer reviews)

Best Sellers Rank: #1,612,519 in Books (See Top 100 in Books) #25 in [Books > Science & Math > Earth Sciences > Geology > Structural](#) #3528 in [Books > Textbooks > Science & Mathematics > Earth Sciences](#)

Customer Reviews

Instead of the classical approximation to the structural geology (field descriptions, geometrical classifications, etc.) the book tackles the issue from a numerical and "physical" point of view. Although the numerical approximation to the structural geology is not straightforward, the text is exhaustive in the explanations of the more complex concepts and mathematical foundations, and is accompanied by good self explanatory figures. The authors share in a web complementary material as exercises and Matlab codes. I strongly recommend this book to everyone planning to use

mathematical tools and programming in relation with the structural geology. It should be very helpful too as textbook for the physical fundamentals of the elastic mechanics, stress and strain tensors, etc. If you are looking for an all-in-one book of structural geology to use as support for your studies or basic research... keep searching.

Excellent book for the modeler when approaching structural geology, however the amount of classical structural geology in the book is strikingly sparse. If you are looking for a textbook that balances the two, you should probably look elsewhere.

One of the most important books for geologist!

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

The Techniques of Modern Structural Geology, Volume 3: Applications of Continuum Mechanics in Structural Geology Exploring for Oil and Gas Traps (Treatise of Petroleum Geology, Handbook of Petroleum Geology Series) (Treatise of Petroleum Geology, Handbook of Petroleum Geology Series) Structural Analysis and Synthesis: A Laboratory Course in Structural Geology Structural Analysis and Synthesis: A Laboratory Course in Structural Geology 3rd (third) edition by Rowland, Stephen M., Duebendorfer, Ernest M., Schiefelbein, I published by Wiley-Blackwell (2007) [Spiral-bound] Fundamentals of Structural Geology Structural Stability of Steel: Concepts and Applications for Structural Engineers The Encyclopedia of Structural Geology and Plate Tectonics (Encyclopedia of Earth Sciences Series) Structural Geology Basic Methods of Structural Geology Structural Geology Algorithms: Vectors and Tensors Earth Structure: An Introduction to Structural Geology and Tectonics Structural Geology: Principles Concepts and Problems (2nd Edition) 3-D Structural Geology: A Practical Guide to Quantitative Surface and Subsurface Map Interpretation Foundations of Structural Geology Structural Geology by Fossen, Haakon 1st (first) Edition [Hardcover(2010)] Studyguide for Structural Geology of Rocks and Regions by Davis, George H. Structural Geology: The Mechanics of Deforming Metamorphic Rocks The Techniques of Modern Structural Geology: Folds and Fractures Structural Geology (Laboratory Manual) Structural Geology (10) by Fossen, Haakon [Hardcover (2010)]

[Dmca](#)