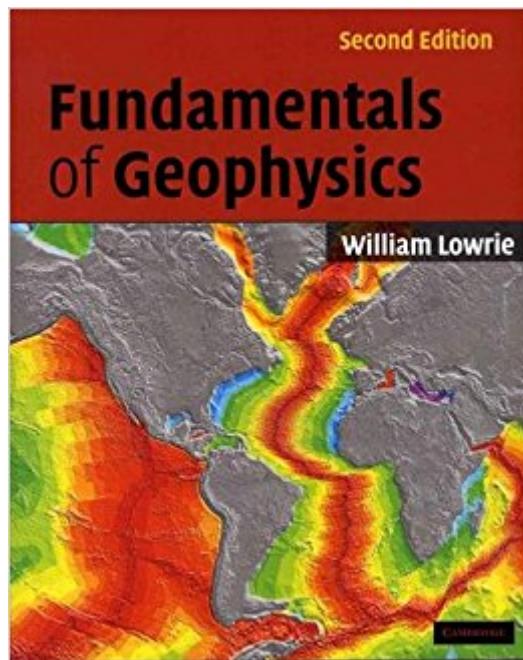


The book was found

# Fundamentals Of Geophysics



## Synopsis

This second edition of Fundamentals of Geophysics has been completely revised and updated, and is the ideal geophysics textbook for undergraduate students of geoscience with an introductory level of knowledge in physics and mathematics. It gives a comprehensive treatment of the fundamental principles of each major branch of geophysics, and presents geophysics within the wider context of plate tectonics, geodynamics and planetary science. Basic principles are explained with the aid of numerous figures and step-by-step mathematical treatments, and important geophysical results are illustrated with examples from the scientific literature. Text-boxes are used for auxiliary explanations and to handle topics of interest for more advanced students. This new edition also includes review questions at the end of each chapter to help assess the reader's understanding of the topics covered and quantitative exercises for more thorough evaluation. Solutions to the exercises and electronic copies of the figures are available at [www.cambridge.org/9780521859028](http://www.cambridge.org/9780521859028).

## Book Information

Paperback: 390 pages

Publisher: Cambridge University Press; 2 edition (October 22, 2007)

Language: English

ISBN-10: 0521675960

ISBN-13: 978-0521675963

Product Dimensions: 8.5 x 0.7 x 11 inches

Shipping Weight: 2.4 pounds (View shipping rates and policies)

Average Customer Review: 3.6 out of 5 stars 5 customer reviews

Best Sellers Rank: #373,054 in Books (See Top 100 in Books) #75 in Books > Science & Math > Earth Sciences > Geophysics #692 in Books > Science & Math > Earth Sciences > Geology #1132 in Books > Textbooks > Science & Mathematics > Earth Sciences

## Customer Reviews

Reviews from the 1st edition 'Bill Lowrie is to be congratulated with this superb effort. I highly recommend this volume as a must-have, middle-level, highly instructive textbook that makes for enjoyable reading at an easily affordable price.' Tectonophysics'A book like this defines the subject ... The scientific treatment is meticulous. Each topic is described precisely and clearly ... an excellent resource for the intermediate student.' Physics of the Earth and Planetary Interiors'This superb textbook manages to bear the weight of the complex mathematics associated with the study of the Earth's surface and interior. William Lowrie simplifies the maths to about second-year degree

level ... an excellent textbook.' New Scientist'The book is well illustrated and clearly presented. I have already found it helpful in teaching second-year geology students and have no doubt that it will be a useful reference book for undergraduates.' Geological Magazine'This is the best and most comprehensive general geophysics book available, not only for undergraduate students but also for more experienced graduate students. It is clearly written, beautifully illustrated, and has the appropriate balance between mathematical and descriptive treatment. I particularly like the brief historical accounts that accompany each chapter. The new second edition includes text boxes that deal concisely with specific background topics (e.g. Fourier transforms), as well as useful exercises for students at the end of each chapter.' Professor Jim Channell, Department of Geological Sciences, University of Florida'This is an excellent textbook. I have recommended the first edition...and I will be recommending this edition in the future.' Journal of Geological Magazine'...will serve as a very clear textbook for students and a very helpful reference for qualified specialists. ...essential reading.' Zentralblatt fur Geologie und Palaontologie

Completely revised and updated, with review questions and exercises, this second edition is a comprehensive treatment of the fundamental principles of each major branch of geophysics. It is an ideal geophysics textbook for undergraduate students of geoscience. Additional resources can be found at [www.cambridge.org/9780521859028](http://www.cambridge.org/9780521859028).

I consider this book a very useful reference. It does not point to advanced and still unresolved issues as a book as "Physics of the Earth" by Stacey and Davis does (which I consider advanced) but that is not its goal. The topics are covered extensively and in an accessible manner. Details left out from derivations can be found in the accompanying "Student's Guide to Geophysical Equation". I used the two together and the couple is a good standalone tool to study geophysics.

Hard to read, as if it were written by someone who speaks math, not English. There are much better geophysical texts out there.

nice book

I tried to use this book as an "updated" textbook for an introductory course on Physics of the Earth (second year geophysics major) I had to taught. Since my area of research is paleomagnetism and rock magnetism the name of William Lowrie was sort of a guarantee that the book would be good.

However, in the middle of the term I had to switch back to the "great classics", namely Stacey's and Garland's books. There are several problems with this book, firstly most of the formulae are presented out of the blues without a comprehensive deduction. That is not the most serious problem though, I also found several mistakes in the 2000 edition (I do not know if further editions took care of these problems). Some of these mistakes are pretty serious. As an example: he states that the international formula for the gravity normal to the Earth's ellipsoid derives directly from MacCullah's formula. That is not correct since in MacCullah's formula the centrifugal term coming from Earth's rotation is not considered!!!! There are also lots of minor mistakes related to missing terms in several formulae and derivatives. I did not touch the chapters related to geomagnetism and rock magnetism but I gather they should be the best in the whole book (I really hope so!!!!) since that is precisely William Lowrie's field of research. However I would not recommend this book at all.

This book is what its title says "FUNDAMENTALS", I think it's a pre-basic book about Geophysics. There are other books better than this one, i.e. Telford's "Applied Geophysics" and Garland's "Introduction to Geophysics" (this is what Mr. Lowrie says).

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

Spectral Analysis in Geophysics (Development in Solid Earth Geophysics) Near-Surface Geophysics (Investigations in Geophysics No. 13) Fundamentals of Geophysics Plastic Injection Molding: Product Design & Material Selection Fundamentals (Vol II: Fundamentals of Injection Molding) (Fundamentals of injection molding series) Plastic Injection Molding: Mold Design and Construction Fundamentals (Fundamentals of Injection Molding) (2673) (Fundamentals of injection molding series) Environmental and Engineering Geophysics Applied Geophysics Field Geophysics Naked Earth ~ The New Geophysics Seismic Data Processing (Investigations in Geophysics, Vol 2) Atmospheric Science, Second Edition: An Introductory Survey (International Geophysics) An Introduction to Applied and Environmental Geophysics Atmosphere, Ocean and Climate Dynamics: An Introductory Text (International Geophysics) Dictionary of Geophysics, Astrophysics, and Astronomy (Comprehensive Dictionary of Physics) Environmental Magnetism, Volume 86: Principles and Applications of Enviromagnetics (International Geophysics) Paleomagnetism, Volume 73, Second Edition: Continents and Oceans (International Geophysics) Introduction to Applied Geophysics: Exploring the Shallow Subsurface Whole Earth Geophysics: An Introductory Textbook for Geologists and Geophysicists Introduction to Geophysical Fluid Dynamics, Volume 101, Second Edition: Physical and Numerical Aspects (International Geophysics) An Introduction to Dynamic Meteorology, Volume 88, Fourth Edition (International Geophysics)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)