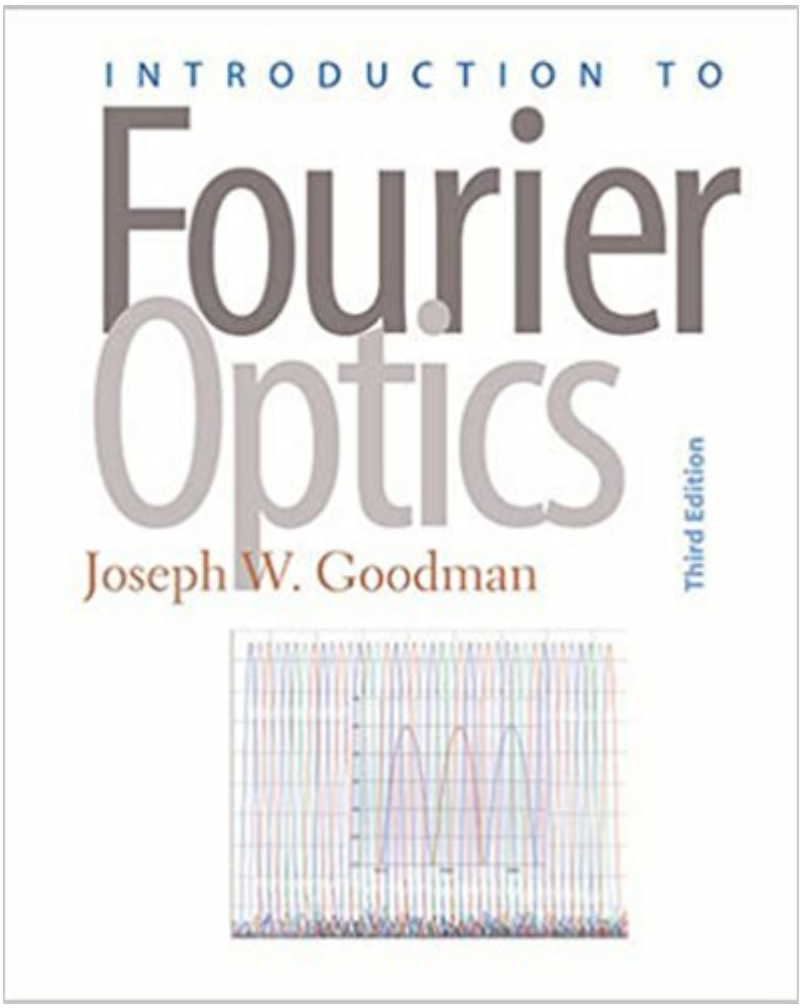
Introduction To Fourier Optics



Synopsis

Fourier analysis is a ubiquitous tool that has found application to diverse areas of physics and engineering. This book deals with its applications in optics, and in particular with its applications to diffraction, imaging, optical data processing, holography and optical communications.

Book Information

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Customer Reviews

"Goodman’s Introduction to Fourier Optics explains scalar wave propagation and transfer functions that are essential for understanding the performance of imaging and other optical systems. It also covers several advanced topics. This is the clearest and best-written textbook I have ever read."â ”James R. Fienup, Robert E. Hopkins Professor of Optics, University of Rochester"Introduction to Fourier Optics provided me with my first introduction to this exciting field more than 30 years ago. Over the years it has continued to serve as a teaching resource, a reference book and a source of insights and inspiration for launching new research directions. Its clarity of presentation has set a gold standard for technical books possibly in all fields."â ”Ravi Athale, DARPA"Joe Goodman’s wonderful book on Fourier Optics is like a good wine. It keeps getting better and better."â ”Demetri Psaltis, California Institute of Technology

Joseph W. Goodman held the William Ayer Chair in Electrical Engineering at Stanford, and also served in several administrative posts, including Chair of the Department of Electrical Engineering, and Senior Associate Dean of Engineering for Faculty Affairs. He is now the William Ayer Professor Emeritus. His work has been recognized by a variety of awards and honors, including the F.E.

Terman Award of the American Society for Engineering Education, the Dennis Gabor Award of the International Society for Optical Engineering (SPIE), the Max Born Award, the Esther Beller Hoffman Award, the Ives Medal from the Optical Society of America, and the Education Medal of the Institute of Electrical and Electronics Engineers. He is a member of the National Academy of Engineering and has served as president of the Optical Society of America and the International Commission for Optics.Â

Amazing book on the subject. Authorative, insightful and well written. A staple of any people serious about optics, diffractiin and imaging systems.

Goodman’s "Fourier Optics" and "Statistical Optics" are two of the best textbooks I have ever read. I am a PhD candidate in EE and these two books have a permanent home on my desk.

I took a class in Fourier Optics and found this text to be indispensable. It explains everything very clearly and concisely, which is a minor miracle for a text at this level. I didn’t have any particular background in optics, and was able to pick this up and understand every word.I do agree with the earlier poster that more ’physical’ or graphical representations of concepts would have been useful as I tend to be a visual learner.

it’s a classic book for optics study. i bought this for my new semester. and this is even cheaper than some used ones, I like it.

A must have for anyone studying optics or that is serious about RF. Also great for understanding the principles behind ultrasound.

I will keep this book!

it is very good

good1

Handbook of Optics, Third Edition Volume V: Atmospheric Optics, Modulators, Fiber Optics, X-Ray and Neutron Optics Handbook of Optics, Third Edition Volume IV: Optical Properties of Materials,

Nonlinear Optics, Quantum Optics (set) Photonics Rules of Thumb: Optics, Electro-Optics, Fiber Optics and Lasers Introduction to Fourier Optics Last-Minute Optics: A Concise Review of Optics, Refraction, and Contact Lenses Handbook of Optics, Third Edition Volume I: Geometrical and Physical Optics, Polarized Light, Components and Instruments(set) Nonlinear Fiber Optics, Fifth Edition (Optics and Photonics) Handbook of Optics, Third Edition Volume III: Vision and Vision Optics(set) Molded Optics: Design and Manufacture (Series in Optics and Optoelectronics) An Introduction to Laplace Transforms and Fourier Series (Springer Undergraduate Mathematics Series) Fourier Analysis: An Introduction (Princeton Lectures in Analysis) Handbook of Fourier Analysis & Its Applications Fourier Acoustics: Sound Radiation and Nearfield Acoustical Holography Applied Partial Differential Equations with Fourier Series and Boundary Value Problems (5th Edition) (Featured Titles for Partial Differential Equations) Applied Partial Differential Equations: With Fourier Series and Boundary Value Problems, 4th Edition Fourier Series, Transforms, and Boundary Value Problems: Second Edition (Dover Books on Mathematics) A First Course in Wavelets with Fourier Analysis First Course in Wavelets with Fourier Analysis Schaum's Outline of Fourier Analysis with Applications to Boundary Value Problems Fourier Series and Boundary Value Problems (Brown and Churchill)