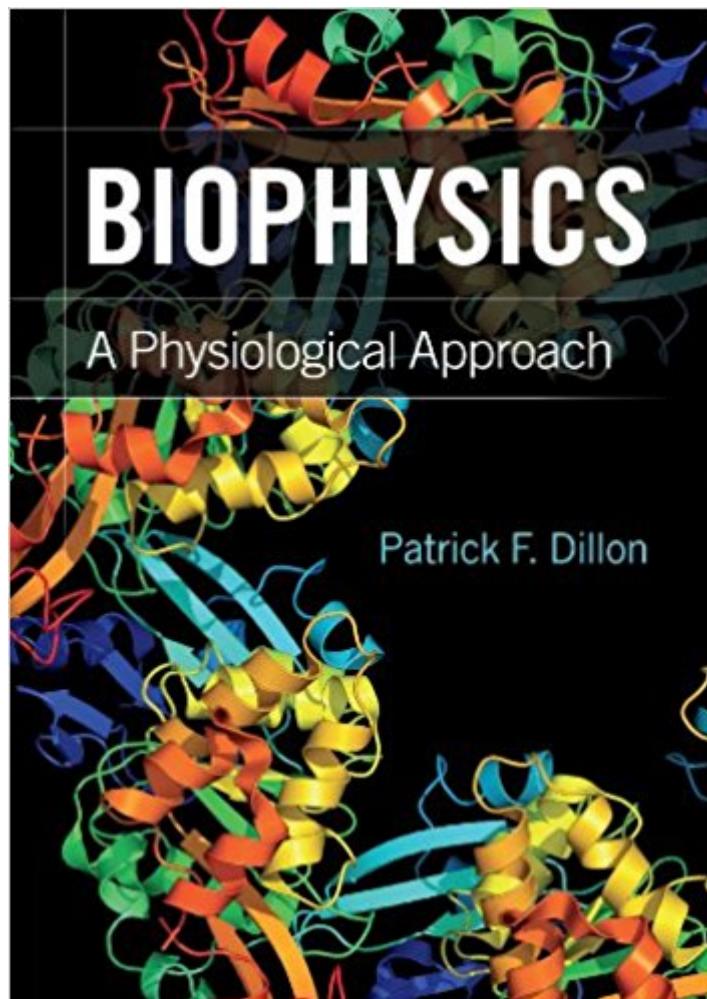


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Biophysics: A Physiological Approach



Synopsis

Specifically tailored to life science students, this textbook explains quantitative aspects of human biophysics with examples drawn from contemporary physiology, genetics and nanobiology. It outlines important physical ideas, equations and examples at the heart of contemporary physiology, along with the organization necessary to understand that knowledge. The wide range of biophysical topics covered include energetics, bond formation and dissociation, diffusion and directed transport, muscle and connective tissue physics, fluid flow, membrane structure, electrical properties and transport, pharmacokinetics and system dynamics and stability. Enabling students to understand the uses of quantitation in modern biology, equations are presented in the context of their application, rather than derivation. They are each directed toward the understanding of a biological principle, with a particular emphasis on human biology. Supplementary resources, including a range of test questions, are available at www.cambridge.org/9781107001442.

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Customer Reviews

"Students of life science in the broad sense tend to have either a mainly biological or physico-chemical approach to their subject, and it is indeed a large leap to acquire a good grasp of both aspects. This book offers rigorous but accessible explanations of basic mechanisms and also presents biomedical applications in a manner that heightens understanding of the biological context. The book presents the biophysical basis of an impressive number of physiological and biochemical mechanisms in a manner that is not found in traditional textbooks. It should certainly help to

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Specifically tailored to life science students, this textbook outlines the important physical ideas, equations and examples at the heart of contemporary physiology, along with the organization necessary to understand that knowledge. The equations are designed to help students understand biological principles, with a particular emphasis on human biology.

Great book!

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