

Librería
Bonilla y Asociados
desde 1950



Título: Chance In Biology. Using Probability To Explore Nature

Autor: Denny Mark/ Gaines Steven

Precio: \$885.00

Editorial:

Año: 2002

Tema:

Edición: 2ª

Sinopsis

ISBN: 9780691094946

Life is a chancy proposition: from the movement of molecules to the age at which we die, chance plays a key role in the natural world. Traditionally, biologists have viewed the inevitable "noise" of life as an unfortunate complication. The authors of this book, however, treat random processes as a benefit. In this introduction to chance in biology, Mark Denny and Steven Gaines help readers to apply the probability theory needed to make sense of chance events using examples from ocean waves to spiderwebs, in fields ranging from molecular mechanics to evolution.

Through the application of probability theory, Denny and Gaines make predictions about how plants and animals work in a stochastic universe. Is it possible to pack a variety of ion channels into a cell membrane and have each operate at near-peak flow? Why are our arteries rubbery? The concept of a random walk provides the necessary insight. Is there an absolute upper limit to human life span? Could the sound of a cocktail party burst your eardrums? The statistics of extremes allows us to make the appropriate calculations. How long must you wait to see the detail in a moonlit landscape? Can you hear the noise of individual molecules? The authors provide answers to these and many other questions.