



Introduction to Mathematical Sociology

By Phillip Bonacich, Philip Lu

Download now

Read Online ➔

Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu

Mathematical models and computer simulations of complex social systems have become everyday tools in sociology. Yet until now, students had no up-to-date textbook from which to learn these techniques. *Introduction to Mathematical Sociology* fills this gap, providing undergraduates with a comprehensive, self-contained primer on the mathematical tools and applications that sociologists use to understand social behavior.

Phillip Bonacich and Philip Lu cover all the essential mathematics, including linear algebra, graph theory, set theory, game theory, and probability. They show how to apply these mathematical tools to demography; patterns of power, influence, and friendship in social networks; Markov chains; the evolution and stability of cooperation in human groups; chaotic and complex systems; and more.

Introduction to Mathematical Sociology also features numerous exercises throughout, and is accompanied by easy-to-use Mathematica-based computer simulations that students can use to examine the effects of changing parameters on model behavior.

- Provides an up-to-date and self-contained introduction to mathematical sociology
- Explains essential mathematical tools and their applications
- Includes numerous exercises throughout
- Features easy-to-use computer simulations to help students master concepts

↓ [Download Introduction to Mathematical Sociology ...pdf](#)

📖 [Read Online Introduction to Mathematical Sociology ...pdf](#)

Introduction to Mathematical Sociology

By Phillip Bonacich, Philip Lu

Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu

Mathematical models and computer simulations of complex social systems have become everyday tools in sociology. Yet until now, students had no up-to-date textbook from which to learn these techniques.

Introduction to Mathematical Sociology fills this gap, providing undergraduates with a comprehensive, self-contained primer on the mathematical tools and applications that sociologists use to understand social behavior.

Phillip Bonacich and Philip Lu cover all the essential mathematics, including linear algebra, graph theory, set theory, game theory, and probability. They show how to apply these mathematical tools to demography; patterns of power, influence, and friendship in social networks; Markov chains; the evolution and stability of cooperation in human groups; chaotic and complex systems; and more.

Introduction to Mathematical Sociology also features numerous exercises throughout, and is accompanied by easy-to-use Mathematica-based computer simulations that students can use to examine the effects of changing parameters on model behavior.

- Provides an up-to-date and self-contained introduction to mathematical sociology
- Explains essential mathematical tools and their applications
- Includes numerous exercises throughout
- Features easy-to-use computer simulations to help students master concepts

Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu Bibliography

- Sales Rank: #1163365 in eBooks
- Published on: 2012-04-01
- Released on: 2012-04-01
- Format: Kindle eBook

 [Download Introduction to Mathematical Sociology ...pdf](#)

 [Read Online Introduction to Mathematical Sociology ...pdf](#)

Editorial Review

Review

"[T]he volume offers certain important building blocks that can represent a bonus for students willing to learn simulation in the future. . . . Bonacich and Lu's work brilliantly introduces much of what ABM students will be requested to know in their subsequent studies."--**Giangiaco­mo Bravo, JASSS**

"If you are interested in sociology specifically, or in some of the others social sciences (especially political science), then this book is a very good introduction for you. . . . I would certainly recommend it to students and others who have some mathematical maturity and are interested in mathematical sociology, mathematical political science, or mathematical psychology."--**James M. Cargal, UMAP Journal**

From the Back Cover

"A first-rate introduction. The coverage is exemplary, starting with basic math techniques and progressing to models that incorporate a number of these techniques. Chapters on evolutionary game theory, cooperative games, and chaos are significantly innovative, as is the incorporation of simulations. This book brings mathematics to life for students who may entertain doubts about the role of math in sociology."--**Peter Abell, professor emeritus, London School of Economics and Political Science**

"This book provides a concise and up-to-date introduction to mathematical sociology and social network analysis. It presents a solid platform for engaging undergraduates in mathematical approaches to sociological inquiry, and includes Mathematica modules with which students can explore the properties and implications of a variety of formal models. I plan on using it in my courses on social networks."--**Noah E. Friedkin, coauthor of Social Influence Network Theory: A Sociological Examination of Small Group Dynamics**

About the Author

Phillip Bonacich is professor emeritus of sociology at the University of California, Los Angeles. Philip Lu is a PhD candidate in sociology at UCLA.

Users Review

From reader reviews:

Donald Diaz:

In this 21st century, people become competitive in every way. By being competitive today, people have to do something to make these individuals survive, being in the middle of the particular crowded place and notice simply by surrounding. One thing that at times many people have underestimated it for a while is reading. Sure, by reading a e-book your ability to survive raise then having chance to remain than other is high. For you personally who want to start reading a book, we give you this Introduction to Mathematical Sociology book as beginning and daily reading guide. Why, because this book is more than just a book.

Jeremy Bryant:

Do you among people who can't read gratifying if the sentence chained in the straightway, hold on guys this aren't like that. This Introduction to Mathematical Sociology book is readable by you who hate those perfect word style. You will find the information here are arrange for enjoyable reading through experience without leaving actually decrease the knowledge that want to provide to you. The writer regarding Introduction to Mathematical Sociology content conveys the idea easily to understand by a lot of people. The printed and e-book are not different in the content material but it just different as it. So , do you nonetheless thinking Introduction to Mathematical Sociology is not loveable to be your top collection reading book?

Doris Cobb:

Your reading 6th sense will not betray you, why because this Introduction to Mathematical Sociology reserve written by well-known writer who really knows well how to make book that can be understand by anyone who all read the book. Written inside good manner for you, still dripping wet every ideas and writing skill only for eliminate your personal hunger then you still skepticism Introduction to Mathematical Sociology as good book but not only by the cover but also from the content. This is one e-book that can break don't determine book by its handle, so do you still needing another sixth sense to pick this particular!? Oh come on your studying sixth sense already alerted you so why you have to listening to another sixth sense.

Nancy Barry:

The book untitled Introduction to Mathematical Sociology contain a lot of information on it. The writer explains the woman idea with easy way. The language is very easy to understand all the people, so do definitely not worry, you can easy to read the item. The book was compiled by famous author. The author will bring you in the new age of literary works. It is easy to read this book because you can read on your smart phone, or gadget, so you can read the book in anywhere and anytime. In a situation you wish to purchase the e-book, you can available their official web-site and order it. Have a nice learn.

**Download and Read Online Introduction to Mathematical Sociology
By Phillip Bonacich, Philip Lu #CNZXV9JQP7U**

Read Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu for online ebook

Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu books to read online.

Online Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu ebook PDF download

Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu Doc

Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu Mobipocket

Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu EPub

CNZXV9JQP7U: Introduction to Mathematical Sociology By Phillip Bonacich, Philip Lu