1. Record Nr. UNINA9910360854403321 Autore Yu Kam Titolo Mathematical Economics: Prelude to the Neoclassical Model / / by Kam Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-27289-3 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XIII, 214 p. 26 illus., 18 illus. in color.) Springer Texts in Business and Economics, , 2192-4333 Collana Disciplina 330.0151 Soggetti Game theory Economic theory Microeconomics Macroeconomics Game Theory, Economics, Social and Behav. Sciences Economic Theory/Quantitative Economics/Mathematical Methods Macroeconomics/Monetary Economics//Financial Economics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Chapter 1. Logic and Proof -- Chapter 2. Sets and Relations -- Chapter Nota di contenuto 3. Basic Topology -- Chapter 4. Linear Algebra -- Chapter 5. Vector Calculus -- Chapter 6. Convex Analysis -- Chapter 7. Optimization --Chapter 8. Probability -- Chapter 9. Dynamic Modeling. This textbook provides a one-semester introduction to mathematical Sommario/riassunto economics for first year graduate and senior undergraduate students. Intended to fill the gap between typical liberal arts curriculum and the rigorous mathematical modeling of graduate study in economics, this text provides a concise introduction to the mathematics needed for core microeconomics, macroeconomics, and econometrics courses. Chapters 1 through 5 builds students' skills in formal proof, axiomatic treatment of linear algebra, and elementary vector differentiation. Chapters 6 and 7 present the basic tools needed for microeconomic analysis. Chapter 8 provides a quick introduction to (or review of)

probability theory. Chapter 9 introduces dynamic modeling, applicable

in advanced macroeconomics courses. The materials assume

prerequisites in undergraduate calculus and linear algebra. Each chapter includes in-text exercises and a solutions manual, making this text ideal for self-study.