Principles of Sequencing and Scheduling

Kenneth R. Baker, Dan Trietsch
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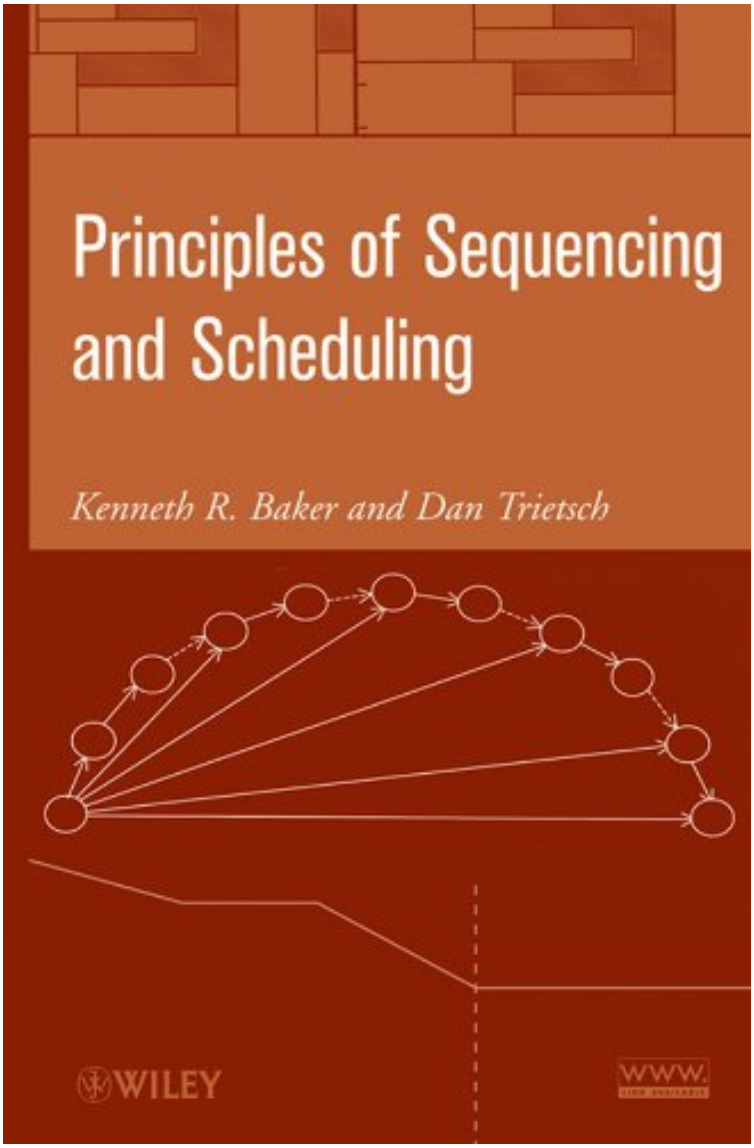

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Kenneth R. Baker, Dan Trietsch : Principles of Sequencing and Scheduling before purchasing it in order to gage whether or not it would be worth my time, and all praised Principles of Sequencing and Scheduling:

1 of 3 people found the following review helpful. A superb bookBy Justin Z. SmithThis book is an update of classic books by Baker. The main update is information on stochastic versions. Highly detailed and recommended.

An up-to-date and comprehensive treatment of the fundamentals of scheduling theory, including recent advances and state-of-the-art topics Principles of Sequencing and Scheduling strikes a unique balance between theory and practice,

providing an accessible introduction to the concepts, methods, and results of scheduling theory and its core topics. With real-world examples and up-to-date modeling techniques, the book equips readers with the basic knowledge needed for understanding scheduling theory and delving into its applications. The authors begin with an introduction and overview of sequencing and scheduling, including single-machine sequencing, optimization and heuristic solution methods, and models with earliness and tardiness penalties. The most current material on stochastic scheduling, including correct scheduling of safety time and the use of simulation for optimization, is then presented and integrated with deterministic models. Additional topical coverage includes: Extensions of the basic model Parallel-machine models Flow shop scheduling Scheduling groups of jobs The job shop problem Simulation models for the dynamic job shop Network methods for project scheduling Resource-constrained project scheduling Stochastic and safe scheduling Extensive end-of-chapter exercises are provided, some of which are spreadsheet-oriented, and link scheduling theory to the most popular analytic platform among today's students and practitionersmdash;the Microsoft Office Excelreg; spreadsheet. Extensive references direct readers to additional literature, and the book's related Web site houses material that reinforces the book's concepts, including research notes, data sets, and examples from the text. Principles of Sequencing and Scheduling is an excellent book for courses on sequencing and scheduling at the upper-undergraduate and graduate levels. It is also a valuable reference for researchers and practitioners in the fields of statistics, computer science, operations research, and engineering. nbsp;

From the Back CoverAn up-to-date and comprehensive treatment of the fundamentals of scheduling theory, including recent advances and state-of-the-art topicsPrinciples of Sequencing and Scheduling strikes a unique balance between theory and practice, providing an accessible introduction to the concepts, methods, and results of scheduling theory and its core topics. With real-world examples and up-to-date modeling techniques, the book equips readers with the basic knowledge needed for understanding scheduling theory and delving into its applications. The authors begin with an introduction and overview of sequencing and scheduling, including single-machine sequencing, optimization and heuristic solution methods, and models with earliness and tardiness penalties. The most current material on stochastic scheduling, including correct scheduling of safety time and the use of simulation for optimization, is then presented and integrated with deterministic models. Additional topical coverage includes: Extensions of the basic model Parallel-machine models Flow shop scheduling Scheduling groups of jobs The job shop problem Simulation models for the dynamic job shop Network methods for project scheduling Resource-constrained project scheduling Stochastic and safe schedulingExtensive end-of-chapter exercises are provided, some of which are spreadsheet-oriented, and link scheduling theory to the most popular analytic platform among today's students and practitionersmdash;the Microsoft Office Excelreg; spreadsheet. Extensive references direct readers to additional literature, and the book's related Web site houses material that reinforces the book's concepts, including research notes, data sets, and examples from the text. Principles of Sequencing and Scheduling is an excellent book for courses on sequencing and scheduling at the upper-undergraduate and graduate levels. It is also a valuable reference for researchers and practitioners in the fields of statistics, computer science, operations research, and engineering.About the AuthorKenneth R. Baker, PhD, is Nathaniel Leverone Professor of Management at Dartmouth College. A Fellow of the Institute for Operations Research and the Management Sciences (INFORMS), Dr. Baker has published extensively in his areas of research interest, which include mathematical modeling, spreadsheet engineering, and scheduling. He is the coauthor of Management Science: The Art of Modeling with Spreadsheets, Second Edition, also published by Wiley. Dan Trietsch, PhD, is Professor of Industrial Engineering at the American University of Armenia. He has authored over thirty journal articles on topics such as network design, statistical quality control, and various aspects of scheduling.