About Fundamentals of Discrete Structures

2nd edition by Damian Lyons, Christina Papadakis-Kanaris, Gary Weiss, and Arthur Werschulz

Selecting a mathematics textbook that meets the needs of a diverse student body can be a challenge. Some have too much information for a beginner; some have too little. The authors of *Fundamentals* of *Discrete Structures*, frustrated by their search for the perfect text, decided to write their own. The result provides an excellent introduction to discrete mathematics that is both accessible to liberal arts majors satisfying their core mathematics requirements, and also challenging enough to engage math and computer science majors.

To engage students who may not be comfortable with traditional mathematics texts, the book uses a light tone when introducing new concepts. While there is an emphasis on computation, it avoids mathematical formalism and formal proofs, thus making it easier for the average student to understand. Unlike other textbooks in this field, *Fundamentals of Discrete Structures* strikes just the right balance: it illuminates the essentials of discrete mathematics while still providing a comprehensive treatment of the subject matter.

FEATURES:

- Complete set of lecture slides and complete solutions manual included
- Useful for liberal arts majors completing a mathematics requirement
- In depth enough to be used in slightly more advanced computer science coursesHelpful for computer science programs that are less mathematically based, such as
- "Information Systems" majors
- Economical and easily portable
- Facebook examples throughout the book show students how discrete mathematics works in real life

New to this edition: This edition contains a focus on social networking to show students how discrete mathematics has an impact on their daily lives. Examples using Facebook run throughout the entire text.

TABLE OF CONTENTS:

- I. Introduction
- 2. Sets and Sequences
- 3. Logic
- 4. Relations
- 5. Functions
- 6. Counting
- 7. Probability
- 8. Algorithms
- 9. Graphs

If you are an instructor or administrator and would like to consider this text for a course that you are teaching, please visit <u>www.pearsonlearningsolutions.com</u> keyword search: Weiss to order your free examination copy today!



ABOUT THE AUTHORS

Damian Lyons earned his Ph.D. in Computer Science from the University of Massachusetts at Amherst in 1986. The recipient of numerous Philips Research awards, he is also the inventor/co-inventor on 14 U.S. patents and 7 European patents for work in robotics and computer vision. He is a professor at Fordham University.

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