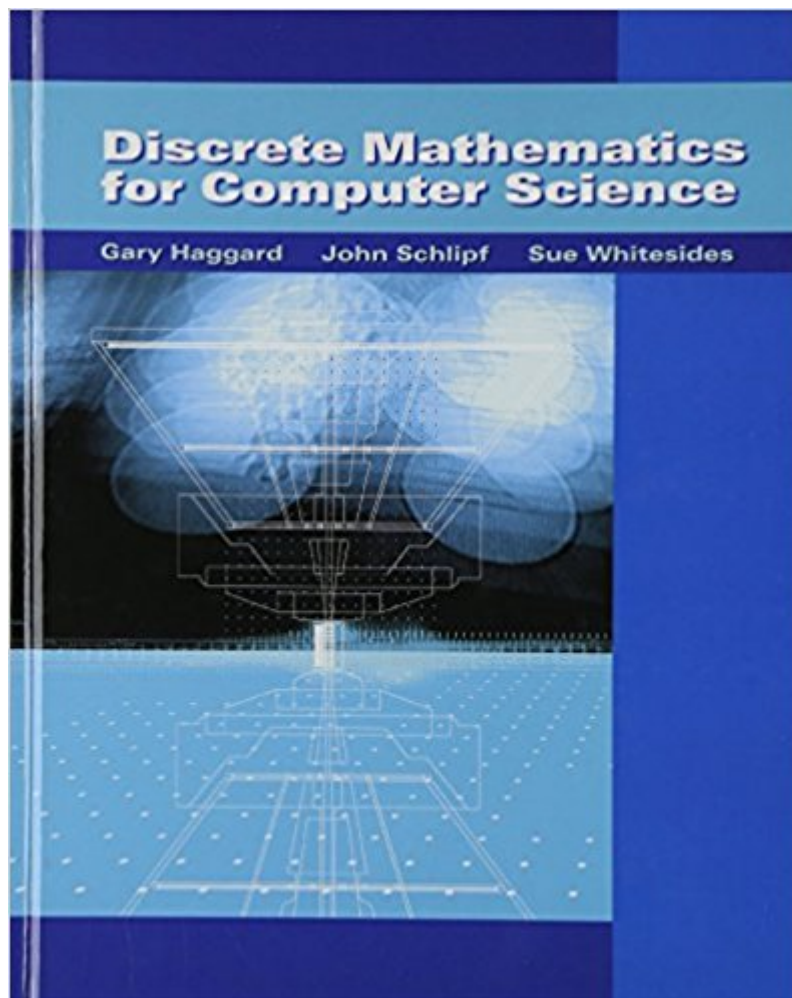


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# Discrete Mathematics For Computer Science (with Student Solutions Manual CD-ROM)



## Synopsis

An increasing number of computer scientists from diverse areas are using discrete mathematical structures to explain concepts and problems. Based on their teaching experiences, the authors offer an accessible text that emphasizes the fundamentals of discrete mathematics and its advanced topics. This text shows how to express precise ideas in clear mathematical language. Students discover the importance of discrete mathematics in describing computer science structures and problem solving. They also learn how mastering discrete mathematics will help them develop important reasoning skills that will continue to be useful throughout their careers.

## Book Information

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Gary Haggard is Professor of Computer Science at Bucknell University. His research in data structures focuses on the implementation of effective algorithms for computing invariants for large combinatorial structures such as graphs. Dr. Haggard's current work is directed towards finding chromatic polynomials of large graphs. John Schlipf is a Professor of Computer Science in the Department of Electrical and Computer Engineering and Computer Science at the University of Cincinnati. His research interests include logic programming and deductive databases, algorithms for satisfiability, computability and complexity, formal verification, and model theory. Sue Whitesides is Professor of Computer Science at McGill University. She holds a Ph.D. from University of Wisconsin and a Masters from Stanford University. Her research interests lie within combinatorial mathematics and theoretical computer science.

This book has an extremely poor organization of information. It's like the authors just threw a bunch of information at the book without thinking about how a student has to go through learning the mathematical concepts. The only reason I have to use this book is because a professor from my university was one of the authors. Get another book on discrete mathematics if you want to really

learn the material.

This textbook was the exact same one I needed for class and was MUCH cheaper than buying from the school store. It was even in better condition than what was advertised! I would definitely recommend this book.

This was a required textbook for a course at my university. My professor pulled all the homework from the ends of each chapter. This part of the book is one of my biggest gripes. The reading sections of this book pack a large amount of material in a brief page or two for each section followed by homework exercises. The exercise sections have are about as long as the actual information sections, meaning they are packed with questions. This would be a positive for this book except the questions aren't similar, so the included CD with the odd problems solved will often be of little help because question 3 will be a completely different sort of problem than question 4. Since each problem is so unique, you'll often be left dealing with problems that are considerably more complex than anything found in the reading sections of the text. If you are using the questions of this book for homework, be prepared to use google extensively. As an example, the book may explain how to perform an operation on 2 sets of numbers. Then in the homework, it will ask you to perform the same operation on 5 sets abstract sets without ever explaining how to go about doing that. I ended up receiving an A in the course, but that was after spending ~8 hours for each 10-14 question homework. Most of that time was spent on the internet trying to learn the material from whatever sites I could find. The reading sections of this text are an excersize in frustration. In one of the explanations for a concept in the book, the author literally uses the phrase "from [problem], it is obvious that the answer is [answer]." That was the entire explanation on the topic. A textbook should never say the phrase "from X, it is obvious that Y" if the whole section is supposed to be telling you how to find Y from X in the first place. This is an introductory text into formal logic, proofs, and set mathematics. Yet, you'll often find that the author skips steps in his solutions which may be obvious to someone familiar with the material but that is obviously not the target of this text. There is an occasional table for reference which doesn't explain what the relationship between anything on the table is (I'm looking at you, Table of Commonly Used Tautologies....). This book covers a great number of topics in a fairly small book, for a textbook that is. However, this book suffers from a lack of depth necessary to reach its potential. If you have a choice, skip this text. If, like me, you are required to use this text.... Google everything and god help you.

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