



## *Introduction to Data Mining* Edition 2

Tan / Steinbach / Kumar / Karpatne

**Binding** Paper Bound with Access Card | **Page Count** 864

Introduction to Data Mining, Second Edition, is intended for use in the Data Mining course.

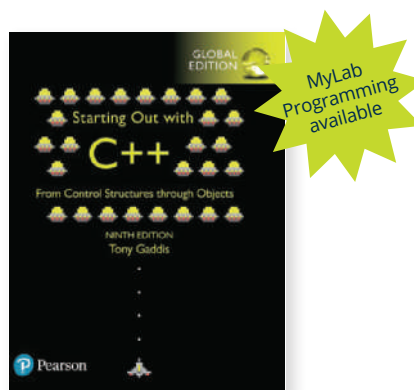
Introduction to Data Mining presents fundamental concepts and algorithms for those learning data mining for the first time. Each concept is explored thoroughly and supported with numerous examples. The text requires only a modest background in mathematics. Each major topic is organized into two chapters, beginning with basic concepts that provide necessary background for understanding each data mining technique, followed by more advanced concepts and algorithms.

This program will provide a better teaching and learning experience for you and your students. It will help present fundamental concepts and algorithms. Written for the beginner, this text provides both theoretical and practical coverage of all data mining topics.

### Table of Contents

1. Introduction
2. Data
3. Classification: Basic Concepts and Techniques
4. Classification: Alternative Techniques
5. Association Analysis: Basic Concepts and Algorithms
6. Association Analysis: Advanced Concepts
7. Cluster Analysis: Basic Concepts and Algorithms
8. Cluster Analysis: Additional Issues and Algorithms
9. Anomaly Detection
10. Avoiding False Discoveries

**ISBN** 9780273769224 | **PUB Date** 5/10/2019



## *Starting Out with C++ from Control Structures to Objects, Global Edition* Edition 9

Gaddis

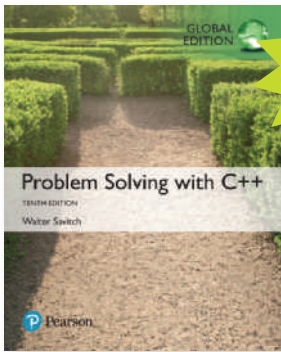
**Binding** Paper Bound with Access Card | **Page Count** 1344

Starting Out with C++: From Control Structures through Objects covers control structures, functions, arrays, and pointers before objects and classes in Tony Gaddis's hallmark accessible, step-by-step presentation. His books help beginning students understand the important details necessary to become skilled programmers at an introductory level. Gaddis motivates the study of both programming skills and the C++ programming language by presenting all the details needed to understand the "how" and the "why"—but never losing sight of the fact that most beginners struggle with this material. His approach is gradual and highly accessible, ensuring that students understand the logic behind developing high-quality programs. As with all Gaddis texts, clear and easy-to-read code listings, concise and practical real-world examples, and an abundance of exercises appear in every chapter.

### Table of Contents

1. Introduction to Computers and Programming
2. Introduction to C++
3. Expressions and Interactivity
4. Making Decisions
5. Loops and Files
6. Functions
7. Arrays and Vectors
8. Searching and Sorting Arrays
9. Pointers
10. Characters, C-Strings, and More about the string Class
11. Structured Data
12. Advanced File Operations
13. Introduction to Classes
14. More about Classes
15. Inheritance, Polymorphism, and Virtual Functions
16. Exceptions and Templates
17. The Standard Template Library
18. Linked Lists
19. Stacks and Queues
20. Recursion
21. Binary Trees
- Appendix A: The ASCII Character Set
- Appendix B: Operator Precedence and Associativity

**ISBN** 9781292222332 | **PUB Date** 8/27/2018



## ***Problem Solving with C++*** **Edition 10**

**Savitch**

**Binding** Paper Bound with Access Card | **Page Count** 1120

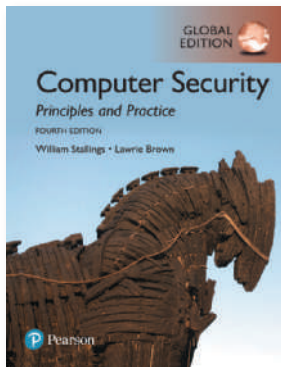
**ISBN** 9781292222820 | **PUB Date** 11/20/2017

For courses in C++ introductory programming.

Now in its 10th Edition, *Problem Solving with C++* is written for the beginning programmer. The text cultivates strong problem-solving skills and programming techniques as it introduces students to the C++ programming language. Author Walt Savitch's approach to programming emphasizes active reading through the use of well-placed examples and self-tests, while flexible coverage means instructors can easily adapt the order of chapters and sections to their courses without sacrificing continuity. Savitch's clear, concise style is a hallmark feature of the text, receiving praise from students and instructors alike, and is supported by a suite of tried-and-true pedagogical tools. The 10th Edition includes ten new Programming Projects, along with new discussions and revisions.

### **Table of Contents**

1. Introduction to Computers and C++ Programming
2. C++ Basics
3. More Flow of Control
4. Procedural Abstraction and Functions That Return a Value
5. Functions for All Subtasks
6. I/O Streams as an Introduction to Objects and Classes
7. Arrays
8. Strings and Vectors
9. Pointers and Dynamic Arrays
10. Defining Classes
11. Friends, Overloaded Operators, and Arrays in Classes
12. Separate Compilation and Namespaces
13. Pointers and Linked Lists
14. Recursion
15. Inheritance
16. Exception Handling
17. Templates
18. Standard Template Library and C++11



## **Computer Security: Principles and Practice Edition 4**

**Stallings / Brown**

**Binding** Paper Bound with Access Card | **Page Count** 800

**ISBN** 9781292220611 | **PUB Date** 11/16/2017

For courses in computer/network security.

Computer Security: Principles and Practice, 4th Edition, is ideal for courses in Computer/Network Security. The need for education in computer security and related topics continues to grow at a dramatic rate and is essential for anyone studying Computer Science or Computer Engineering. Written for both an academic and professional audience, the 4th Edition continues to set the standard for computer security with a balanced presentation of principles and practice. The new edition captures the most up-to-date innovations and improvements while maintaining broad and comprehensive coverage of the entire field. The extensive offering of projects provides students with hands-on experience to reinforce concepts from the text. The range of supplemental online resources for instructors provides additional teaching support for this fast-moving subject.

The new edition covers all security topics considered Core in the ACM/IEEE Computer Science Curricula 2013, as well as subject areas for CISSP (Certified Information Systems Security Professional) certification. This textbook can be used to prep for CISSP Certification and is often referred to as the when it comes to information security certification. The text provides in-depth coverage of Computer Security, Technology and Principles, Software Security, Management Issues, Cryptographic Algorithms, Internet Security and more.

### **Table of Contents**

Chapter 1 Overview
PART ONE COMPUTER SECURITY TECHNOLOGY AND PRINCIPLES
Chapter 2 Cryptographic Tools
Chapter 3 User Authentication
Chapter 4 Access Control
Chapter 5 Database and Data Center Security
Chapter 6 Malicious Software
Chapter 7 Denial-of-Service Attacks
Chapter 8 Intrusion Detection
Chapter 9 Firewalls and Intrusion Prevention Systems
PART TWO SOFTWARE SECURITY AND TRUSTED SYSTEMS
Chapter 10 Buffer Overflow
Chapter 11 Software Security
Chapter 12 Operating System Security
Chapter 13 Cloud and IoT Security
PART THREE MANAGEMENT ISSUES
Chapter 14 IT Security Management and Risk Assessment
Chapter 15 IT Security Controls, Plans and Procedures
Chapter 16 Physical and Infrastructure Security
Chapter 17 Human Resources Security
Chapter 18 Security Auditing
Chapter 19 Legal and Ethical Aspects
PART FOUR CRYPTOGRAPHIC ALGORITHMS
Chapter 20 Symmetric Encryption and Message Confidentiality
Chapter 21 Public-Key Cryptography and Message Authentication
PART FIVE NETWORK SECURITY
Chapter 22 Internet Security Protocols and Standards
Chapter 23 Internet Authentication Applications
Chapter 24 Wireless Network Security

APPENDICES
ACRONYMS
LIST OF NIST DOCUMENTS
REFERENCES
INDEX
ONLINE CHAPTERS AND APPENDICES
Online chapters, appendices, and other documents are Premium Content, available via the access card printed in the front of the book.
Chapter 25 Linux Security
Chapter 26 Windows and Windows Vista Security
Appendix B Some Aspects of Number Theory
Appendix C Standards and Standard-Setting Organizations
Appendix D Random and Pseudorandom Number Generation
Appendix E Message Authentication Codes Based on Block Ciphers
Appendix F TCP/IP Protocol Architecture
Appendix G Radix-64 Conversion
Appendix H The Domain Name System
Appendix I The Base-Rate Fallacy
Appendix J SHA-3
Appendix K Glossary



## *Java: An Introduction to Problem Solving and Programming, Edition 8*

Savitch

**Binding** Paper Bound with Access Card | **Page Count** 1056

For courses in introductory Computer Science courses using Java, and other introductory programming courses in Computer Science, Computer Engineering, CIS, MIS, IT, and Business.

Ideal for a wide range of introductory computer science courses, *Java: An Introduction to Problem Solving and Programming, 8th Edition* introduces students to object-oriented programming and important concepts such as design, testing and debugging, programming style, interfaces and inheritance, and exception handling. A concise, accessible introduction to Java, the text covers key Java language features in a manner that resonates with introductory programmers.

### Table of Contents

1. Introduction to Computers and Java
  2. Basic Computation
  3. Flow of Control: Branching
  4. Flow of Control: Loops
  5. Defining Classes and Methods
  6. More About Objects and Methods
  7. Arrays
  8. Inheritance, Polymorphism, and Interfaces
  9. Exception Handling
  10. Streams, File I/O, and Networking
  11. Recursion
  12. Dynamic Data Structures and Generics
- Appendices:
1. Getting Java
  2. Running Applets
  3. Protected and Package Modifiers
  4. The DecimalFormat Class
  5. Javadoc
  6. Differences Between C++ and Java
  7. Unicode Character Codes
  8. Introduction to Java 8 Functional Programming
  9. The Iterator Interface
  10. Cloning
  11. Java Reserved Keywords

**ISBN** 9781292247472 | **PUB Date** 4/1/2018



## *Java Software Solutions Edition 9*

Lewis / Loftus

**Binding** Paper Bound with Access Card | **Page Count** 800

For courses in Java programming.

*Java Software Solutions* establishes a strong foundation of programming techniques to foster well-designed object-oriented software. Heralded for its integration of small and large real-world examples, the worldwide best-selling text emphasizes problem-solving and design skills and introduces students to the process of constructing high-quality software systems. The 9th Edition features a sweeping overhaul of Graphics Track coverage, to fully embrace the JavaFX API. This fresh approach enriches programmers' understandings of core object-oriented principles.

### Table of Contents

1. Introduction
  2. Data and Expressions
  3. Using Classes and Objects
  4. Writing Classes
  5. Conditionals and Loops
  6. More Conditionals and Loops
  7. Object-Oriented Design
  8. Arrays
  9. Inheritance
  10. Polymorphism
  11. Exceptions
  12. Recursion
  13. Collections
- Appendix A: Glossary  
Appendix B: Number Systems  
Appendix C: The Unicode Character Set  
Appendix D: Java Operators  
Appendix E: Java Modifiers  
Appendix F: Java Coding Guidelines  
Appendix G: JavaFX Layout Panes  
Appendix H: JavaFX Scene Builder  
Appendix I: Regular Expressions  
Appendix J: Javadoc Documentation Generator  
Appendix K: Java Syntax  
Appendix L: Answers to Self-Review Questions  
Index

**ISBN** 9781292221724 | **PUB Date** 4/2/2018



## Java How To Program (Early Objects) Edition 11

Deitel / Deitel

Binding Paper Bound with Access Card | Page Count 1296

ISBN 9781292223858 | PUB Date 9/3/2017

For courses in Java programming.

The Deitels' groundbreaking How to Program series offers unparalleled breadth and depth of programming fundamentals, object-oriented programming concepts and intermediate-level topics for further study. Java How to Program, Early Objects, 11th Edition, presents leading-edge computing technologies using the Deitel signature live-code approach, which demonstrates concepts in hundreds of complete working programs. The 11th Edition presents updated coverage of Java SE 8 and new Java SE 9 capabilities, including JShell, the Java Module System, and other key Java 9 topics. Java How to Program, Late Objects, 11th Edition also is available.

### Table of Contents

1. Introduction to Computers, the Internet and Java
2. Introduction to Java Applications; Input/Output and Operators
3. Introduction to Classes, Objects, Methods and Strings
4. Control Statements: Part 1; Assignment, ++ and -- Operators
5. Control Statements: Part 2; Logical Operators
6. Methods: A Deeper Look
7. Arrays and ArrayLists
8. Classes and Objects: A Deeper Look
9. Object-Oriented Programming: Inheritance
10. Object-Oriented Programming: Polymorphism and Interfaces
11. Exception Handling: A Deeper Look
12. JavaFX Graphical User Interfaces: Part 1
13. JavaFX GUI: Part 2
14. Strings, Characters and Regular Expressions
15. Files, Input/Output Streams, NIO and XML Serialization
16. Generic Collections
17. Lambdas and Streams
18. Recursion
19. Searching, Sorting and Big O
20. Generic Classes and Methods: A Deeper Look
21. Custom Generic Data Structures
22. JavaFX Graphics and Multimedia
23. Concurrency
24. Accessing Databases with JDBC
25. Introduction to JShell: Java 9's REPL
- Chapters on the Web
- A. Operator Precedence Chart
- B. ASCII Character Set
- C. Keywords and Reserved Words
- D. Primitive Types
- E. Using the Debugger
- Appendices on the Web
- Index

- Online Chapters and Appendices
26. Swing GUI Components: Part 1
  27. Graphics and Java 2D
  28. Networking
  29. Java Persistence API (JPA)
  30. JavaServer™ Faces Web Apps: Part 1
  31. JavaServer™ Faces Web Apps: Part 2
  32. REST-Based Web Services
  33. (Optional) ATM Case Study, Part 1: Object-Oriented Design with the UML
  34. (Optional) ATM Case Study, Part 2: Implementing an Object-Oriented Design
  35. Swing GUI Components: Part 2
  36. Java Module System and Other Java 9 Features
  - F. Using the Java API Documentation
  - G. Creating Documentation with javadoc
  - H. Unicode®
  - I. Formatted Output
  - J. Number Systems
  - K. Bit Manipulation
  - L. Labeled break and continue Statements
  - M. UML 2: Additional Diagram Types
  - N. Design Patterns





## *Starting Out with Python, Edition 4*

Gaddis

**Binding** Paper Bound with Access Card | **Page Count** 744

For courses in Python programming.

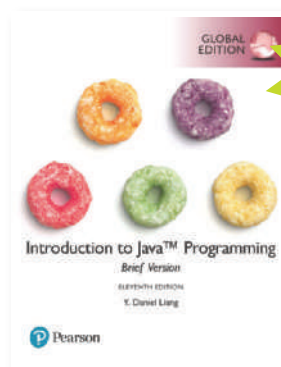
Starting Out with Python, 4th Edition, Tony Gaddis' accessible coverage introduces students to the basics of programming in a high-level language. Python, an easy-to-learn and increasingly popular object-oriented language, allows readers to become comfortable with the fundamentals of programming without the troublesome syntax that can be challenging for novices. With the knowledge acquired using Python, students gain confidence in their skills and learn to recognize the logic behind developing high-quality programs.

Starting Out with Python discusses control structures, functions, arrays, and pointers before objects and classes. As with all Gaddis texts, clear and easy-to-read code listings, concise and practical real-world examples, focused explanations, and an abundance of exercises appear in every chapter.

### Table of Contents

1. Introduction to Computers and Programming
2. Input, Processing, and Output
3. Decision Structures and Boolean Logic
4. Repetition Structures
5. Functions
6. Files and Exceptions
7. Lists and Tuples
8. More About Strings
9. Dictionaries and Sets
10. Classes and Object-Oriented Programming
11. Inheritance
12. Recursion
13. GUI Programming
- Appendix A. Installing Python
- Appendix B. Introduction to IDLE
- Appendix C. The ASCII Character Set
- Appendix D. Predefined Named Colors
- Appendix E. More About the Import Statement
- Appendix F. Installing Modules with the Pip Utility
- Appendix G. Answers to Checkpoints

**ISBN** 9781292225753 | **PUB Date** 4/1/2018



## *Intro to Java Programming, Brief Version, Global Edition Edition 11*

Liang

**Binding** Paper Bound with Access Card | **Page Count** 824

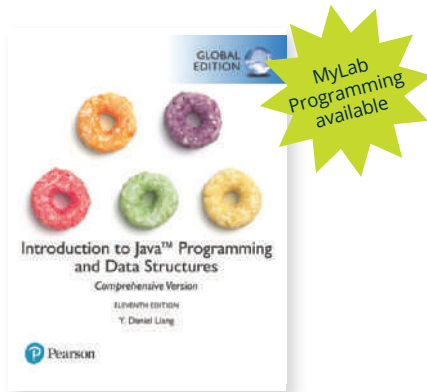
For courses in Java Programming.

This text is intended for a 1-semester CS1 course sequence. The Brief Version contains the first 18 chapters of the Comprehensive Version. The first 13 chapters are appropriate for preparing the AP Computer Science exam.

### Table of Contents

1. Introduction to Computers, Programs, and Java
2. Elementary Programming
3. Selections
4. Mathematical Functions, Characters, and Strings
5. Loops
6. Methods
7. Single-Dimensional Arrays
8. Multidimensional Arrays
9. Objects and Classes
10. Object-Oriented Thinking
11. Inheritance and Polymorphism
12. Exception Handling and Text I/O
13. Abstract Classes and Interfaces
14. JavaFX Basics
15. Event-Driven Programming and Animations
16. JavaFX UI Controls and Multimedia
17. Binary I/O
18. Recursion
- Appendixes
- Appendix A Java Keywords
- Appendix B The ASCII Character Set
- Appendix C Operator Precedence Chart
- Appendix D Java Modifiers
- Appendix E Special Floating-Point Values
- Appendix F Number Systems
- Appendix G Bitwise Operations
- Appendix H Regular Expressions
- Appendix I Enumerated Types

**ISBN** 9781292222035 | **PUB Date** 4/1/2018



## *Introduction to Java Programming and Data Structures, Comprehensive Version* Edition 11

Liang

Binding Paper Bound with Access Card | Page Count 1232

ISBN 9781292221878 | PUB Date 2/19/2018

This text is intended for a 1-semester CS1 course sequence. The Brief Version contains the first 18 chapters of the Comprehensive Version. The first 13 chapters are appropriate for preparing the AP Computer Science exam.

For courses in Java Programming. A fundamentals-first introduction to basic programming concepts and techniques.

Designed to support an introductory programming course, Introduction to Java Programming and Data Structures teaches concepts of problem-solving and object-orientated programming using a fundamentals-first approach. Beginner programmers learn critical problem-solving techniques then move on to grasp the key concepts of object-oriented, GUI programming, advanced GUI and Web programming using JavaFX. This course approaches Java GUI programming using JavaFX, which has replaced Swing as the new GUI tool for developing cross-platform-rich Internet applications and is simpler to learn and use. The 11th edition has been completely revised to enhance clarity and presentation, and includes new and expanded content, examples, and exercises.

### Table of Contents

1. Introduction to Computers, Programs, and Java
2. Elementary Programming
3. Selections
4. Mathematical Functions, Characters, and Strings
5. Loops
6. Methods
7. Single-Dimensional Arrays
8. Multidimensional Arrays
9. Objects and Classes
10. Object-Oriented Thinking
11. Inheritance and Polymorphism
12. Exception Handling and Text I/O
13. Abstract Classes and Interfaces
14. JavaFX Basics
15. Event-Driven Programming and Animations
16. JavaFX UI Controls and Multimedia
17. Binary I/O
18. Recursion
19. Generics
20. Lists, Stacks, Queues, and Priority Queues
21. Sets and Maps
22. Developing Efficient Algorithms
23. Sorting
24. Implementing Lists, Stacks, Queues, and Priority Queues
25. Binary Search Trees
26. AVL Trees
27. Hashing
28. Graphs and Applications
29. Weighted Graphs and Applications
30. Aggregate Operations for Collection Streams
- Appendices

- Appendix A Java Keywords
- Appendix B The ASCII Character Set
- Appendix C Operator Precedence Chart
- Appendix D Java Modifiers
- Appendix E Special Floating-Point Values
- Appendix F Number Systems
- Appendix G Bitwise Operations
- Appendix H Regular Expressions
- Appendix I Enumerated types
- Bonus Chapters 31–44 are available from the Companion Website at [www.pearsonhighered.com/liang](http://www.pearsonhighered.com/liang):
  - 31. Advanced JavaFX and FXML
  - 32. Multithreading and Parallel Programming
  - 33. Networking
  - 34. Java Database Programming
  - 35. Advanced Database Programming
  - 36. Internationalization
  - 37. Servlets
  - 38. JavaServer Pages
  - 39. JavaServer Faces
  - 40. RMI
  - 41. Web Services
  - 42. 2-4 Trees and B-Trees
  - 43. Red-Black Trees
  - 44. Testing Using JUnit



## *Fundamentals of Database Systems* Edition 7

Elmasri / Navathe

Binding Paper Bound with Access Card | Page Count 1272

ISBN 9781292097619 | PUB Date 2/19/2018

For database systems courses in computer science

This book introduces the fundamental concepts for designing, using, and implementing database systems and applications. It stresses the fundamentals of database modeling and design, the languages and models provided by the database management systems, and database system implementation techniques. The book is meant to be used as a textbook for a one- or two-semester course in database systems at the junior, senior, or graduate level, and as a reference book. It aims to provide an in-depth and up-to-date presentation of the most important aspects of database systems and applications, and related technologies. It is assumed that readers are familiar with elementary programming and data-structuring concepts and that they have had some exposure to the basics of computer organization.

### Table of Contents

Part 1: Introduction to Databases	Part 9: Transaction Processing, Concurrency Control, and Recovering
Chapter 1: Databases and Database Users	Chapter 20: Introduction to Transaction Processing Concepts and Theory
Chapter 2: Database Systems Concepts and Architecture	Chapter 21: Concurrency Control Techniques
Part 2: Conceptual Data Modeling and Database Design	Chapter 22: Database Recovery Techniques
Chapter 3: Data Modeling Using the Entity Relationship (ER) Model	Part 10: Distributed Databases, NOSQL Systems, Cloud Computing, and Big Data
Chapter 4: The Enhanced Entity Relationship (EER) Model	Chapter 23: Distributed Database Concepts
Part 3: The Relational Data Model and SQL	Chapter 24: NOSQL Databases and Big Data Storage Systems
Chapter 5: The Relational Data Model and Relational Database Constraints	Chapter 25: Big Data Technologies Based on MapReduce and Hadoop
Chapter 6: Basic SQL	Part 11: Advanced Database Models, Systems, and Applications
Chapter 7: More SQL: Complex Queries, Triggers, Views, and Schema Modification	Chapter 26: Enhanced Data Models: Introduction to Active, Temporal, Spatial, Multimedia, and Deductive Databases
Chapter 8: The Relational Algebra and Relational Calculus	Chapter 27: Introduction to Information Retrieval and Web Search
Chapter 9: Relational Database Design by ER- and EER-to-Relational Mapping	Chapter 28: Data Mining Concepts
Part 4: Database Programming Techniques	Chapter 29: Overview of Data Warehousing and OLAP
Chapter 10: Introduction to SQL Programming Techniques	Part 12: Additional Database Topics: Security
Chapter 11: Web Database Programming Using PHP	Chapter 30: Database Security
Part 5: Object, Object-Relational, and XML: Concepts, Models, Languages, and Standards	Appendix A: Alternative Diagrammatic Notations for ER Models
Chapter 12: Object and Object-Relational Databases	Appendix B: Parameters of Disks
Chapter 13: XML: Extensible Markup Language	Appendix C: Overview of the QBE Language
Part 6: Database Design Theory and Normalization	Appendix D: Overview of the Hierarchical Data Model
Chapter 14: Basics of Functional Dependencies and Normalization for Relational Databases	Appendix E: Overview of the Network Data Model
Chapter 15: Relational Database Design Algorithms and Further Dependencies	
Part 7: File Structures, Hashing, Indexing, and Physical Database Design	
Chapter 16: Disc Storage, Basic File Structures, Hashing, and Modern Storage Architectures	
Chapter 17: Indexing Structures for Files and Physical Database Design	
Part 8: Query Processing and Optimization	
Chapter 18: Strategies for Query Processing	
Chapter 19: Query Optimization	





## **Absolute C++ Edition 6**

**Savitch / Mock**

**Binding** Paper Bound with Access Card | **Page Count** 1008

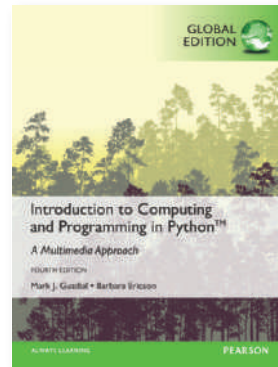
For courses in computer programming for business and engineering.

Absolute C++ is a comprehensive introduction to the C++ programming language. The text is organized around the specific use of C++, providing students with an opportunity to master the language completely. Adaptable to a wide range of users, the text is appropriate for beginner to advanced programmers familiar with the C++ language. The Sixth Edition covers everything from basic syntax to more advanced topics, such as polymorphism, exception handling, and the Standard Template Library, making it ideal for both beginner and intermediate students.

### **Table of Contents**

Chapter 1 C++ BASICS	1
Chapter 2 FLOW OF CONTROL	45
Chapter 3 FUNCTION BASICS	99
Chapter 4 PARAMETERS AND OVERLOADING	145
Chapter 5 ARRAYS	185
Chapter 6 STRUCTURES AND CLASSES	239
Chapter 7 CONSTRUCTORS AND OTHER TOOLS	275
Chapter 8 OPERATOR OVERLOADING, FRIENDS, AND REFERENCES	321
Chapter 9 STRINGS	367
Chapter 10 POINTERS AND DYNAMIC ARRAYS	419
Chapter 11 SEPARATE COMPILATION AND NAMESPACES	471
Chapter 12 STREAMS AND FILE I/O	515
Chapter 13 RECURSION	571
Chapter 14 INHERITANCE	613
Chapter 15 POLYMORPHISM AND VIRTUAL FUNCTIONS	661
Chapter 16 TEMPLATES	693
Chapter 17 LINKED DATA STRUCTURES	731
Chapter 18 EXCEPTION HANDLING	825
Chapter 19 STANDARD TEMPLATE LIBRARY	857
Chapter 20 PATTERNS AND UML (online at <a href="http://www.pearsonhighered.com/savitch">www.pearsonhighered.com/savitch</a> )	
Appendix 1 C++ KEYWORDS	915
Appendix 2 PRECEDENCE OF OPERATORS	917
Appendix 3 THE ASCII CHARACTER SET	919
Appendix 4 SOME LIBRARY FUNCTIONS	921
Appendix 5 OLD AND NEW HEADER FILES	929

**ISBN** 9781292098593 | **PUB Date** 4/1/2018



## **Introduction to Computing and Programming in Python Edition 4**

**Guzdial / Ericson**

**Binding** Paperback | **Page Count** 528

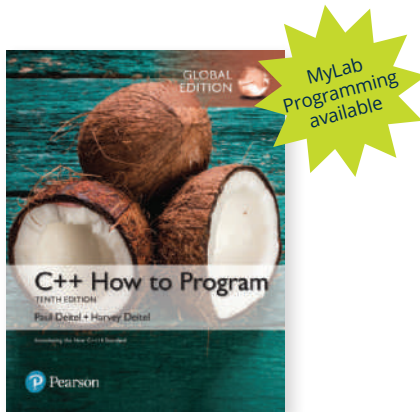
For courses in computer programming with Python.

Introduction to Computing and Programming in Python is a uniquely researched and up-to-date volume that is widely recognized for its successful introduction to the subject of Media Computation. Emphasizing creativity, classroom interaction, and in-class programming examples, this text takes a bold and unique approach to computation that engages students and applies the subject matter to the relevancy of digital media. The 4th Edition teaches students to program in an effort to communicate via social computing outlets.

### **Table of Contents**

1 Introduction to Computer Science and Media Computation	3
2 Introduction to Programming	18
3 Creating and Modifying Text	44
4 Modifying Pictures Using Loops	74
5 Picture Techniques with Selection	114
6 Modifying Pixels by Position	145
7 Modifying Sounds Using Loops	203
8 Modifying Samples in a Range	235
9 Making Sounds by Combining Pieces	255
10 Building Bigger Programs	279
11 Manipulating Text with Methods and Files	310
12 Advanced Text Techniques: Web and Information	337
13 Making Text for the Web	359
14 Creating and Modifying Movies	382
15 Speed	403
16 Functional Programming	423
17 Object Oriented Programming	444

**ISBN** 9781292109862 | **PUB Date** 4/2/2018



## **C++ How to Program (Early Objects Version) Edition 10**

**Deitel / Deitel**

**Binding** Paper Bound with Access Card | **Page Count** 1080

**ISBN** 9781292153346 | **PUB Date** 2/19/2018

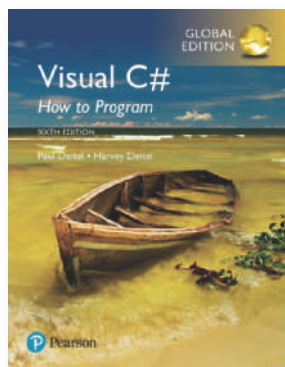
For courses in C++ programming.

C++ How to Program is accessible to readers with little or no programming experience, yet comprehensive enough for the professional programmer. The Deitels' signature live-code approach presents the concepts in the context of full working programs followed by sample executions. The early objects approach gets readers thinking about objects immediately, allowing them to master the concepts. Emphasis is placed on achieving program clarity and building well-engineered software. Interesting, entertaining, and challenging exercises encourage students to make a difference and use computers and the Internet to work on problems. To keep readers up-to-date with leading-edge computing technologies, the Tenth Edition conforms to the C++11 standard and the new C++14 standard.

### **Table of Contents**

1 Introduction to Computers and C++ 1
2 Introduction to C++ Programming, Input/Output and Operators
3 Introduction to Classes, Objects, Member Functions and Strings
4 Algorithm Development and Control Statements: Part 1
5 Control Statements: Part 2; Logical Operators
6 Functions and an Introduction to Recursion
7 Class Templates array and vector; Catching Exceptions
8 Pointers
9 Classes: A Deeper Look
10 Operator Overloading; Class string
11 Object-Oriented Programming: Inheritance
12 Object-Oriented Programming: Polymorphism
13 Stream Input/Output: A Deeper Look
14 File Processing
15 Standard Library Containers and Iterators
16 Standard Library Algorithms
17 Exception Handling: A Deeper Look
18 Introduction to Custom Templates
19 Custom Templated Data Structures
20 Searching and Sorting
21 Class string and String Stream Processing: A Deeper Look
22 Bits, Characters, C Strings and structs
Chapters on the Web
A Operator Precedence and Associativity
B ASCII Character Set
C Fundamental Types
D Number Systems
D.1 Introduction
D.2 Abbreviating Binary Numbers as Octal and Hexadecimal Numbers
D.3 Converting Octal and Hexadecimal Numbers to Binary Numbers

D.4 Converting from Binary, Octal or Hexadecimal to Decimal
D.5 Converting from Decimal to Binary, Octal or Hexadecimal
D.6 Negative Binary Numbers: Two's Complement Notation
E Preprocessor
E.1 Introduction
E.2 #include Preprocessing Directive
E.3 #define Preprocessing Directive: Symbolic Constants
E.4 #define Preprocessing Directive: Macros
E.5 Conditional Compilation
E.6 #error and #pragma Preprocessing Directives
E.7 Operators # and ##
E.8 Predefined Symbolic Constants
E.9 Assertions
E.10 Wrap-Up
Appendices on the Web
Index
Chapters 23–26 and Appendices F–J are PDF documents posted online at the book's password-protected Companion Website, which is accessible from <a href="http://www.pearsonhighered.com/deitel">http://www.pearsonhighered.com/deitel</a> .
23 Other Topics
24 C++11 and C++14: Additional Features
25 ATM Case Study, Part 1: Object-Oriented Design with the UM
26 ATM Case Study, Part 2: Implementing an Object-Oriented Design
F C Legacy Code Topics
G UML: Additional Diagram Types
H Using the Visual Studio Debugger
I Using the GNU C++ Debugger
J Using the Xcode Debugger



## Visual C# How to Program Edition 6

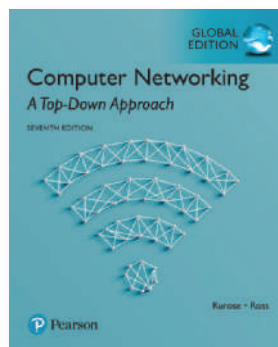
Deitel / Deitel

**Binding** Paper Bound with Access Card | **Page Count** 1056

### Table of Contents

1. Introduction to Computers, the Internet and Visual C#
  2. Introduction to Visual Studio and Visual Programming
  3. Introduction to C# App Programming
  4. Introduction to Classes, Objects, Methods and strings
  5. Algorithm Development and Control Statements: Part 1
  6. Control Statements: Part 2
  7. Methods: A Deeper Look
  8. Arrays; Introduction to Exception Handling
  9. Introduction to LINQ and the List Collection
  10. Classes and Objects: A Deeper Look
  11. Object-Oriented Programming: Inheritance
  12. OOP: Polymorphism and Interfaces
  13. Exception Handling: A Deeper Look
  14. Graphical User Interfaces with Windows Forms: Part 1
  15. Graphical User Interfaces with Windows Forms: Part 2
  16. Strings and Characters: A Deeper Look
  17. Files and Streams
  18. Searching and Sorting
  19. Custom Linked Data Structures
  20. Generics
  21. Generic Collections; Functional Programming with LINQ/PLINQ
  22. Databases and LINQ
  23. Asynchronous Programming with async and await
- Appendices
- A Operator Precedence Chart
  - B Simple Types
  - C ASCII Character Set
- INDEX
- ONLINE Topics
- Web App Development with ASP.NET
  - XML and LINQ to XML
  - Universal Windows Platform (UWP) GUI, Graphics, Multimedia and XAML
  - REST Web Services
  - Cloud Computing with Microsoft Azure™
  - Windows Presentation Foundation (WPF) GUI, Graphics, Multimedia and XAML
  - ATM Case Study, Part 1: Object-Oriented Design with the UML
  - ATM Case Study, Part 2: Implementing an Object- Oriented Design in C#
  - Using the Visual Studio Debugger

**ISBN** 9781292153469 | **PUB Date** 4/1/2018



## Computer Networking: A Top-Down Approach Edition 7

Kurose / Ross

**Binding** Paper Bound with Access Card | **Page Count** 856

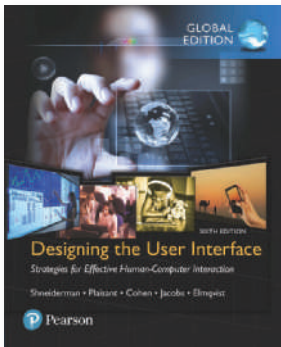
For courses in networking/communications

The 7th Edition of the popular Computer Networking: A Top Down Approach builds on the author's long tradition of teaching this complex subject through a layered approach in a "top-down manner." The text works its way from the application layer down toward the physical layer, motivating students by exposing them to important concepts early in their study of networking. Focusing on the Internet and the important issues of networking, this text provides an excellent foundation for students in computer science and electrical engineering, without requiring extensive knowledge of programming or mathematics.

### Table of Contents

- Computer Networks and the Internet
- Application Layer
- Transport Layer
- The Network Layer: Data Plane
- The Network Layer: Control Plane
- The Link Layer: Links, Access Networks, and LANs
- Wireless and Mobile Networks
- Security in Computer Networks
- Multimedia Networking

**ISBN** 9781292153599 | **PUB Date** 4/2/2018



## *Designing the User Interface: Strategies for Effective Human-Computer Interaction* Edition 6

Shneiderman / Plaisant / Cohen / Jacobs /  
Elmqvist / Diakopoulos

Binding Paper Bound with Access Card | Page Count 624

ISBN 9781292153919 | PUB Date 4/1/2018

For courses in human-computer interaction.

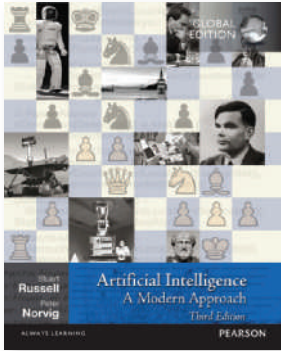
The 6th Edition of *Designing the User Interface* provides a comprehensive, authoritative, and up-to-date introduction to the dynamic field of human-computer interaction (HCI) and user experience (UX) design. The book covers theoretical foundations and design processes such as expert reviews and usability testing.

By presenting current research and innovations in HCI, the authors strive to inspire students, guide designers, and provoke researchers to seek solutions that improve the experiences of novice and expert users, while achieving universal usability.

Updates include current HCI design methods, new design examples, totally revamped coverage of social media, search and voice interaction, major revisions to chapter content, figures, and updates to references.

### Table of Contents

- Part 1. Introduction
  - 1. Usability of Interactive Systems
  - 2. Universal Usability
  - 3. Guidelines, Principles, and Theories
- Part 2. Design Processes
  - 4. Design
  - 5. Evaluation and the User Experience
  - 6. Design Case Studies
- Part 3. Interaction Styles
  - 7. Direct Manipulation and Immersive Environments
  - 8. Fluid Navigation
  - 9. Expressive Human and Command Languages
  - 10. Devices
  - 11. Communication and Collaboration
- Part 4. Design Issues
  - 12. Advancing the User Experience
  - 13. The Timely User Experience
  - 14. Documentation and User Support (a.k.a. Help)
  - 15. Information Search
  - 16. Data Visualization
- Afterword. Societal and Individual Impact of User Interfaces



## *Artificial Intelligence: A Modern Approach* Edition 3

Russell / Norvig

Binding paper | Page count 1152

ISBN 9781292153964 | PUB Date 4/1/2018

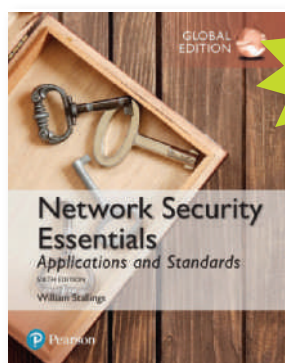
For one or two-semester, undergraduate or graduate-level courses in Artificial Intelligence.

The long-anticipated revision of this best-selling text offers the most comprehensive, up-to-date introduction to the theory and practice of artificial intelligence.

### Table of Contents

I. Artificial Intelligence	B. Notes on Languages and Algorithms
1. Introduction	B.1 Defining Languages with Backus—Naur Form (BNF)
2. Intelligent Agents	B.2 Describing Algorithms with Pseudocode
II. Problem-solving	B.3 Online Help
3. Solving Problems by Searching	Bibliography
4. Beyond Classical Search	Index
5. Adversarial Search	
6. Constraint Satisfaction Problems	
III. Knowledge, Reasoning, and Planning	
7. Logical Agents	
8. First-Order Logic	
9. Inference in First-Order Logic	
10. Classical Planning	
11. Planning and Acting in the Real World	
12. Knowledge Representation	
IV. Uncertain Knowledge and Reasoning	
13. Quantifying Uncertainty	
14. Probabilistic Reasoning	
15. Probabilistic Reasoning over Time	
16. Making Simple Decisions	
17. Making Complex Decisions	
V. Learning	
18. Learning from Examples	
19. Knowledge in Learning	
20. Learning Probabilistic Models	
21. Reinforcement Learning	
VI. Communicating, Perceiving, and Acting	
22. Natural Language Processing	
23. Natural Language for Communication	
24. Perception	
25. Robotics	
VII. Conclusions	
26. Philosophical Foundations	
27. AI: The Present and Future	
A. Mathematical Background	
A.1 Complexity Analysis and $O()$ Notation	
A.2 Vectors, Matrices, and Linear Algebra	
A.3 Probability Distributions	





## *Network Security Essentials: Applications and Standards* Edition 6

**Stallings**

**Binding** Paper Bound with Access Card | **Page Count** 464

For courses in corporate, computer and network security.

Network Security Essentials: Applications and Standards introduces students to the critical importance of internet security in our age of universal electronic connectivity. Amidst viruses, hackers, and electronic fraud, there is a heightened need among organizations and individuals to protect data and resources from disclosure, guarantee their authenticity, and safeguard systems from network-based attacks.

The 6th Edition covers the expanding developments in the cryptography and network security disciplines, giving students a practical survey of applications and standards. The text places emphasis on applications widely used for Internet and corporate networks, as well as extensively deployed internet standards.

### Table of Contents

1. Introduction
- Part I: Cryptography
2. Symmetric Encryption and Message
3. Public-Key Cryptography and Message
4. Key Distribution and User Authentication
5. Network Access Control and Cloud Security
6. Transport-Level Security
7. Wireless Network Security
8. Electronic Mail Security
9. IP Security
- Part III: System Security
10. Malicious Software
11. Intruders
12. Firewalls
- APPENDICES
- Appendix A Some Aspects of Number Theory
- Appendix B Projects for Teaching Network Security

**ISBN** 9781292154855 | **PUB Date** 4/1/2018



## *Starting Out with C++: Early Objects* Edition 9

**Gaddis / Walters / Muganda**

**Binding** Paper Bound with Access Card | **Page Count** 1272

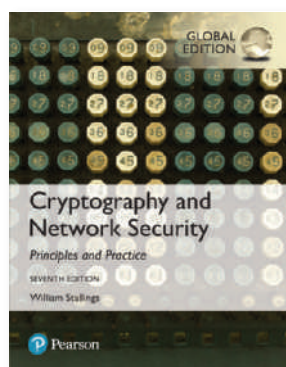
For a two-term, three-term, or accelerated one- term course in C++ programming.

Starting Out with C++: Early Objects 9th Edition introduces the fundamentals of C++ to novices and experienced students alike. In clear, easy-to-understand terms, the text introduces all of the necessary topics for beginning C++ programmers. Real-world examples allow students to apply their knowledge in understanding how, why, and when to implement the features of C++. The text is organized in a progressive, step-by-step fashion that allows for flexibility.

### Table of Contents

- Introduction to Computers and Programming
- Introduction to C++
- Expressions and Interactivity
- Making Decisions
- Looping
- Functions
- Introduction to Classes and Objects
- Arrays
- Searching, Sorting, and Algorithm Analysis
- Pointers
- More about Classes and Object-Oriented Programming
- More on C-Strings and the String Class
- Advanced File and I/O Operations
- Recursion
- Polymorphism and Virtual Functions
- Exceptions, Templates, and the Standard Template Library (STL)
- Linked Lists
- Stacks and Queues
- Binary Trees

**ISBN** 9781292157276 | **PUB Date** 4/1/2018



## *Cryptography and Network Security: Principles and Practice* Edition 7

**Stallings**

**Binding** Paper Bound with Access Card | **Page Count** 768

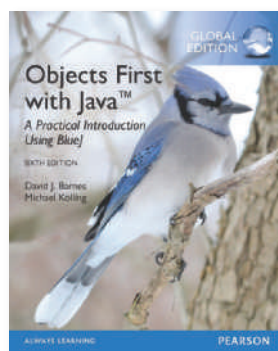
For courses in cryptography, computer security, and network security.

Stallings' *Cryptography and Network Security*, 7th Edition, introduces students to the compelling and evolving field of cryptography and network security. In an age of viruses and hackers, eavesdropping, and electronic fraud on a global scale, security is paramount. The book provides a practical survey of both the principles and practice of cryptography and network security. The first part of the book explores the basic issues to be addressed by a network security capability. The latter part of the book deals with the practice of network security.

### Table of Contents

1. Computer and Network Security Concepts
2. Introduction to Number Theory
3. Classical Encryption Techniques
4. Block Ciphers and the Data Encryption Standard
5. Finite Fields
6. Advanced Encryption Standard
7. Block Cipher Operation
8. Random Bit Generation and Stream Ciphers
9. Public-Key Cryptography and RSA
10. Other Public-Key Cryptosystems
11. Cryptographic Hash Functions
12. Message Authentication Codes
13. Digital Signatures
14. Key Management and Distribution
15. User Authentication Protocols
16. Network Access Control and Cloud Security
17. Transport-Level Security
18. Wireless Network Security
19. Electronic Mail Security
20. IP Security
- Appendix A Projects for Teaching Cryptography and Network Security
- Appendix B Sage Examples

**ISBN** 9781292158587 | **PUB Date** 4/1/2018



## *Objects First with Java: A Practical Introduction Using BlueJ* Edition 6

**Barnes**

**Binding** Paper Bound with Access Card | **Page Count** 664

An introduction to object-oriented programming for beginners

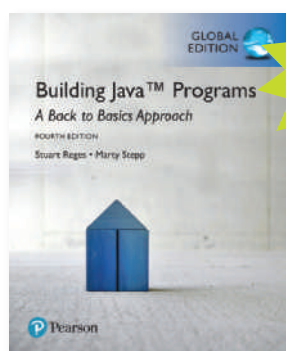
*Objects First with Java: A Practical Introduction* focuses on general object-oriented and programming concepts from a software engineering perspective.

The Java programming language and BlueJ—the Java development environment—are the two tools used in the book.

### Table of Contents

- Part 1: Foundations of object orientation
1. Objects and classes
  2. Understanding class definitions
  3. Object interaction
  4. Grouping objects
  5. Functional Processing of Collections (Advanced)
  6. More-sophisticated behavior
  7. Fixed-size collections – arrays
  8. Designing classes
  9. Well-behaved objects
- Part 2: Application structures
10. Improving structure with inheritance
  11. More about inheritance
  12. Further abstraction techniques
  13. Building graphical user interfaces
  14. Handling errors
  15. Designing applications
  16. A case study
- Appendices
- A Working with a BlueJ project
  - B Java data types
  - C Operators
  - D Java control structures
  - E Running Java without BlueJ
  - F Using the debugger
  - G Unit unit-testing tools
  - H Teamwork tools
  - I Javadoc
  - J Program style guide
  - K Important library classes

**ISBN** 9781292159041 | **PUB Date** 4/1/2018



MyLab  
Programming  
available

## ***Building Java Programs: A Back to Basics Approach*** **Edition 4**

**Reges / Stepp**

**Binding** Paper Bound with Access Card | **Page Count** 1224

For courses in Java programming

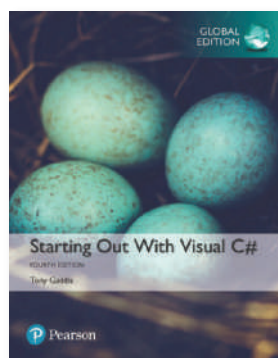
Newly revised and updated, Building Java Programs: A Back to Basics Approach 4th Edition uses a layered strategy to introduce Java programming and overcome the high failure rates common in introductory computer science courses. The authors' proven and class-tested "back to basics" approach introduces programming fundamentals first, with new syntax and concepts added over multiple chapters. Object-oriented programming is discussed only once students have developed a basic understanding of Java programming.

Previous editions have established the text's reputation as an excellent choice for two-course sequences in introductory computer science, and new material in the 4th Edition incorporates concepts related to Java 8, functional programming, and image manipulation.

### **Table of Contents**

1. Introduction to Java Programming
2. Primitive Data and Definite Loops
3. Introduction to Parameters and Objects
4. Conditional Execution
5. Program Logic and Indefinite Loops
6. File Processing
7. Arrays
8. Classes
9. Inheritance and Interfaces
10. ArrayLists
11. Java Collections Framework
12. Recursion
13. Searching and Sorting
14. Stacks and Queues
15. Implementing a Collection Class
16. Linked Lists
17. Binary Trees
18. Advanced Data Structures
19. Functional Programming with Java
- Appendix A Java Summary
- Appendix B The Java API Specification and Javadoc Comments
- Appendix C Additional Java Syntax

**ISBN** 9781292161686 | **PUB Date** 4/1/2018



## ***Starting Out with Visual C#*** **Edition 4**

**Gaddis**

**Binding** Paper Bound with Access Card | **Page Count** 792

For courses in introductory C# programming

Clear, friendly, and approachable, Starting Out With Visual C# 4th Edition is an ideal beginning text for students with no programming experience. Detailed walk-throughs and a readable, comprehensible style make the text inviting to new programmers, while practical example programs highlight the most important programming topics. Gaddis's detailed, step-by-step instructions teach a GUI-based approach that motivates students with familiar graphical elements.

Topics are examined progressively in each chapter, with objects taught before classes. The 4th Edition has been completely updated for Visual Studio 2015 and contains new sections on debugging, accessing controls on different forms, and auto-properties.

### **Table of Contents**

1. Introduction to Computers and Programming
2. Introduction to Visual C#
3. Processing Data
4. Making Decisions
5. Loops, Files, and Random Numbers
6. Modularizing Your Code with Methods
7. Arrays and Lists
8. More about Processing Data
9. Classes and Multifunction Projects
10. Inheritance and Polymorphism
11. Databases

**ISBN** 9781292163215 | **PUB Date** 2/25/2018



## *Web Development and Design Foundations with HTML5* Edition 8

Felke-Morris

**Binding** Paper Bound with Access Card | **Page Count** 720

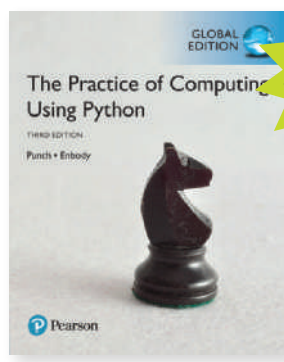
For courses in web development and design

Updated and expanded in this 8th Edition, *Web Development and Design Foundations with HTML5* presents a comprehensive introduction to the development of effective web sites. Intended for beginning web development courses, the text relates both the necessary hard skills (such as HTML5, CSS, and JavaScript) and soft skills (design, e-commerce, and promotion strategies) considered fundamental to contemporary web development. An emphasis on hands-on practice guides students, as the text introduces topics ranging from configuration and layout to accessibility techniques and ethical considerations. The 8th Edition contains updated coverage of HTML5 and CSS, expanded coverage of designing for mobile devices, and more.

### Table of Contents

1. Introduction to the Internet and World Wide Web
2. HTML Basics
3. Configuring Color and Text with CSS
4. Visual Elements and Graphics
5. Web Design
6. Page Layout
7. More on Links, Layout, and Mobile
8. Tables
9. Forms
10. Web Development
11. Web Multimedia and Interactivity
12. E-Commerce Overview
13. Web Promotion
14. A Brief Look at JavaScript and jQuery

**ISBN** 9781292164076 | **PUB Date** 4/1/2018



MyLab  
Programming  
available

## *The Practice of Computing Using Python* Edition 3

Punch / Enbody

**Binding** Paperback | **Page Count** 912

For courses in Python programming

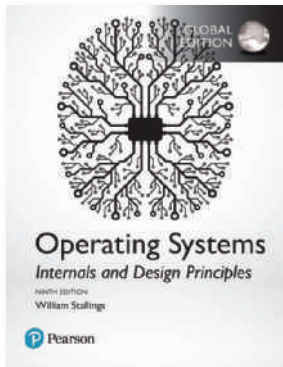
*Practice of Computing Using Python* 3rd Edition introduces both majors and nonmajors taking CS1 courses to computational thinking using Python, with a strong emphasis on problem solving through computer science. The authors have chosen Python for its simplicity, powerful built-in data structures, advanced control constructs, and practicality. The text is built from the ground up for Python programming, rather than having been translated from Java or C++.

Focusing on data manipulation and analysis, the text allows students to work on real problems using Internet-sourced or self-generated data sets that represent their own work and interests. The authors also emphasize program development and provide both majors and nonmajors with a practical foundation in programming.

### Table of Contents

- I. Thinking About Computing
0. The Study of Computer Science
- II. Starting to Program
1. Beginnings
2. Control
3. Algorithms and Program Development
- III. Data Structures and Functions
4. Working with Strings
5. Functions-QuickStart
6. Files and Exceptions I
7. Lists and Tuples
8. More on Functions
9. Dictionaries and Sets
10. More Program Development
- IV. Classes, making your own Data Structure and Algorithms
12. More on Classes
13. Program Development with Classes
- V. Being a better programmer
14. Files and Exceptions II
15. Recursion: Another Control Mechanism
16. Other Fun Stuff with Python
17. The End, or Perhaps the Beginning

**ISBN** 9781292166629 | **PUB Date** 1/17/2017



## *Operating Systems: Internals and Design Principles* Edition 9

**Stallings**

**Binding** Paper Bound with Access Card | **Page Count** 912

Intended for use in a one- or two-semester undergraduate course in operating systems for computer science, computer engineering, and electrical engineering majors

Operating Systems: Internals and Design Principles provides a comprehensive and unified introduction to operating systems topics. Stallings emphasizes both design issues and fundamental principles in contemporary systems and gives readers a solid understanding of the key structures and mechanisms of operating systems. He discusses design trade-offs and the practical decisions affecting design, performance and security. The book illustrates and reinforces design concepts and ties them to real-world design choices through the use of case studies in Linux, UNIX, Android, and Windows 8.

### Table of Contents

- I. Thinking About Computing
- 0. The Study of Computer Science
- II. Starting to Program
- 1. Beginnings
- 2. Control
- 3. Algorithms and Program Development
- III. Data Structures and Functions
- 4. Working with Strings
- 5. Functions-QuickStart
- 6. Files and Exceptions I
- 7. Lists and Tuples
- 8. More on Functions
- 9. Dictionaries and Sets
- 10. More Program Development
- IV. Classes, making your own Data Structure and Algorithms
- 12. More on Classes
- 13. Program Development with Classes
- V. Being a better programmer
- 14. Files and Exceptions II
- 15. Recursion: Another Control Mechanism
- 16. Other Fun Stuff with Python
- 17. The End, or Perhaps the Beginning

**ISBN** 9781292214290 | **PUB Date** 4/1/2018



## *Computer Science: An Overview* Edition 13

**Brooks** / **Brylow**

**Binding** Paperback | **Page Count** 736

For the Introduction to Computer Science course

A broad exploration of computer science—with the depth needed to understand concepts

Computer Science: An Overview provides a bottom-up, concrete-to-abstract foundation that students can build upon to see the relevance and interrelationships of future computer science courses. Its comprehensive coverage and clear language are accessible to students from all backgrounds, encouraging a practical and realistic understanding.

More than 1,000 questions and exercises, Chapter Review Problems, and Social Issues questions reinforce core concepts. The 13th Edition continues its focus on Python to provide programming tools for exploration and experimentation. A new full-color design reflects the use of color in most modern programming interfaces to aid the programmer's understanding of code. Syntax coloring is now used more effectively for clarifying code and pseudocode segments in the text, and many figures and diagrams are now rendered more descriptively.

### Table of Contents

- Introduction
- 1 Data Storage
- 2 Data Manipulation
- 3 Operating Systems
- 4 Networking and the Internet
- 5 Algorithms
- 6 Programming Languages
- 7 Software Engineering
- 8 Data Abstractions
- 9 Database Systems
- 10 Computer Graphics
- 11 Artificial Intelligence
- 12 Theory of Computation

**ISBN** 9781292263427 | **PUB Date** 3/23/2018