

Books Useful for Students of Java or UML

There is no recommended textbook for the course.

The good news is that there are many good tutorials and websites freely available. But you may find it useful to have a good comprehensive Java book.

There are dozens of Java books on the market of varying quality and depth of coverage. I have attempted to give some guidance by listing some of the more popular ones below.

Many are in the Boole library in the Computing section (Q+1) but not always the current edition!

Be aware that there have been different versions of Java. We are using Java 5 (also called Java 1.5) so the book needs to cover this. The new release Java 6 is also fine with no differences from our point of view. Java 5 was released in 2004 and Java 6 recently.

Older books will only cover Java 2 (or J2SE 1.2, 1.3 or 1.4) which has various differences. Some of these books can be useful if you already have them but don't buy one and be aware of the changes. JDK 1.1 (circa 1997) is very out of date.

All of the books below cover Java 5 (except for where stated otherwise).

Introductory level

- The Java Tutorial: A Short Course on the Basics (4th Edition) by Sharon Zakhour, Scott Hommel, Jacob Royal, Isaac Rabinovitch, Tom Risser, Mark Hoeber; Prentice Hall, 2006 (free on-line <http://java.sun.com/docs/books/tutorial/>)
 - *Comments: Handy tutorial freely available*
- Objects First With Java: A Practical Introduction Using BlueJ (3rd Edition) by David J. Barnes, Michael Kolling; Prentice Hall, 2006.
 - *Comments: "Objects-first" approach using the interactive BlueJ environment - good introductory book*
- Head First Java, 2nd Edition by Kathy Sierra and Bert Bates; O'Reilly Media, Inc., 2005.
 - *Comments: Informal approach typical of the "Head first" series from O'Reilly*

- Java Software Solutions: Foundations of Program Design (5th Edition) by John Lewis and William Loftus; Addison Wesley, 2006.
 - *Comments: Well written introductory book with easy to follow examples*
- Java Concepts by Cay Horstman; Wiley, 2007
 - *Comments: Slimmed down version of Big Java*
- The Art and Science of Java by Eric Roberts; Addison-Wesley, 2007.
 - *Comments: following the recommendations of the Association of Computing Machinery's Java Task Force*
- Java for Students (5th Edition) by Douglas Bell and Mike Parr; Prentice Hall 2006
 - *Comments: Okay but light*
- Java 5: Objects First by Barry I. Soroka; Jones and Bartlett 2006
- Java: A Beginner's Guide, 4th Ed. by Herbert Schildt; Osborne, 2006

Comprehensive textbooks

- Big Java by Cay S. Horstmann; Wiley, 2007
 - *Comment: A very good comprehensive Java textbook*
- Java How to Program (6th Edition) by Harvey & Paul Deitel & Associates; Prentice Hall, 2004
- Introduction to Java Programming - Comprehensive Version (6th Edition) by Y Daniel Liang; Prentice Hall, 2006
 - *Comments: "Fundamentals-first" Java textbook - comprehensive*
- Java Programming Language, The, 4th Edition by Ken Arnold, James Gosling, David Holmes; Prentice Hall 2005
- Thinking in Java (4th Edition) by Bruce Eckel; Prentice Hall, 2006 (free 3rd ed. <http://www.mindview.net/Books/TIJ/>)
- Java: An Introduction to Problem Solving and Programming (4th Edition) by Walter Savitch; Prentice Hall, 2004

- Learning Java (3rd Edition) by Patrick Niemeyer and Jonathan Knudsen; O'Reilly Media, Inc., 2005
- An Introduction to Programming and Object-Oriented Design Using Java (2nd Edition) by Jaime Niño and Frederick A. Hosch; Wiley 2005

Java References

- Java in a Nutshell, 5th Edition by David Flanagan; O'Reilly Media, Inc., 2005
 - *Comments: More a reference than a text*
- Java Precisely, 2nd ed., Sestoft, MIT Press, 2005
 - *Comments: Succinct summary of main features*

Additional Books of Possible Interest

- Just Java 2, 6th Edition by Peter van der Linden; Prentice Hall 2004
 - *Comments: Introduction to Java technology for non-programmer. Not a Java textbook*
- JFC Swing Tutorial, The: A Guide to Constructing GUIs, 2nd Edition by Kathy Walrath, Mary Campione, Alison Huml, Sharon Zakhour; Prentice Hall 2004
- Java Swing by Marc Loy et al.; O'Reilly, 2003
- Object Oriented Software Development Using Java (2nd Edition) by Xiaoping Jia; Addison Wesley, 2002
 - *Comments: Advanced Java programming - Java 2 version*
- Core Java (TM), Volume I - Fundamentals (8th Edition) by Cay S. Horstmann and Gary Cornell; Prentice Hall, 2004
- Effective Java Programming Language Guide by Joshua Bloch; Prentice Hall 2001

Java 2 books

You may come across these books in the library.

- Object-oriented program development using Java: a class-centered approach, Bronson, Thomson, 2004

- Object-Oriented Programming with Java: An Introduction by David J. Barnes; Prentice-Hall 2000
- Java First Contact by Roger Garside and John Mariani; Thomson, 2002
- Java the UML Way: Integrating Object-Oriented Design and Programming; Else Lervik and Vegard B. Havdal; Wiley 2002
- Java Gently: Programming Principles Explained by Judy Bishop; Addison Wesley 2001
- Object-Oriented Programming in Java by Martin Kalin; Wiley 2001

Books on Software Development

Most of the books below are too detailed for this course but parts may be useful.

- Software Engineering, 8th edition, Ian Sommerville, Addison-Wesley, 2006
 - *Comments: Well known text on soft. eng. - sample chapters, slides, etc. are here ->*
<http://www.comp.lancs.ac.uk/computing/resources/IanS/SE8/index.html>
- Software Engineering: A Practitioner's Approach, 6th edition, Roger Pressman, McGraw-Hill, 2004
 - *Comments: Rival book to Sommerville*
- Object-Oriented and Classical Software Engineering, Stephen R. Schach, McGraw-Hill, 2004
 - *Comments: Balance of structured and OO methods*
- Code Complete: A Practical Handbook of Software Construction, Steve C. McConnell, Microsoft press, 1993
 - *Comments: Mostly covers programming and implementation issues*
- Rapid Development: Taming Wild Software Schedules, Steve C. McConnell, Microsoft Press, 1996
- Test Driven Development, Kent Beck, Addison-Wesley 2002

UML books

Again these are all too detailed for CS2200 but may serve as a helpful reference.

- Object Oriented Analysis and Design with the Unified Modelling Language, Ali Baramhi, 1999
- Object-oriented systems analysis and design using UML, Bennett, McRobb, and Farmer, McGraw-Hill, 2002
- Schaum's outline of UML, Bennett, Skelton and Lunn; McGraw-Hill 2001
- An introduction to Object-oriented analysis: Objects and UML in Plain English, David William Brown, Wiley, 2002
- Requirements Analysis and System Design: Developing Information Systems with UML, Maciaszek, Addison Wesley, 2001
- Systems analysis and design: an object-oriented approach with UML, Dennis, Wixon and Tegarden, Wiley, 2002
- UML distilled: a brief guide to the standard object modeling language, Fowler, Addison-Wesley, 2000
- The Unified Modeling Language User Guide, Booch, Rumbaugh and Jacobson, Addison Wesley, 1999
- Object-oriented analysis and design: understanding system development with UML 2.0, O'Docherty, Wiley, 2005.
- Object-oriented systems analysis and design using UML, Simon Bennet, Steve McRobb, Ray Farmer, McGraw-Hill, 2002

More Advanced Material

- The Unified Modeling Language Reference Manual, Rumbaugh, Jacobson and Booch, 1999
- Applying UML and patterns, Larman, Prentice Hall, 2002
- UML 2.0 in a nutshell by Dan Pilone with Neil Pitman; O'Reilly Media, 2005
- Java Design: Objects, UML, and Process by Kirk Knoernschild, Addison Wesley 2001 on-line in UCC here
<http://proquest.safaribooksonline.com/0201750449>
- Learning UML by Sinan Si Alhir; O'Reilly, 2003 on-line within UCC here
<http://proquest.safaribooksonline.com/0596003447>
- Requirements analysis and system design: developing information systems with UML by Maciaszek, Leszek; Addison-Wesley, 2001

- Design patterns: elements of reusable object-oriented software by Erich Gamma ... [et al.]. ;Addison-Wesley, 1995