

# 95-815, Programming Basics in Java

## REQUIRED READING LIST

Java: A Beginner's Guide, 4th Ed., Herbert Schildt, ISBN-10:0072263849

This is a **minimum** list-- you may need to read more for completion

<b>Lecture 1</b> Java intro, history	Chapter 1
<b>Lecture 2</b> Syntax: data types Reserved words Binary arithmetic Operators Expressions Statements Parameter passing	Chapter 2 Chapter 3
<b>Lecture 3</b> Classes, methods Constructors Get and set methods Access modifiers Variables and their scoping	Chapter 4 Chapter 6
<b>Lecture 4</b> More object oriented Inheritance Method overriding Constructors, more Method overloading Abstract classes Interfaces	Chapter 7 Chapter 8
<b>Lecture 5</b> Arrays String class Java i/o, streams, writers Exception handling	Chapter 5 Chapter 9 Chapter 10
<b>Lecture 6</b> Applets, html applet tag Swing and awt Lightweight, heavyweight containers Jar files and packages	Chapter 14 Chapter 15

## OPTIONAL READING LIST

**Thinking in Java (3rd Edition)**, by Bruce Eckel, ISBN 013-100287-2, available online for free at <http://www.mindview.net/Books/TIJ/>

<b>Lecture</b>	<b>Thinking in Java</b> <b>Third Edition</b>
<b>Lecture 1</b>  Java intro, history	Pages 24, 31-72
<b>Lecture 2</b>  Syntax: data types Reserved words Binary arithmetic Operators Expressions Statements Parameter passing	Your First Program: Pages 77-84
<b>Lecture 3</b>  Classes, methods Constructors Get and set methods Access modifiers Variables and their scoping	Controlling program flow: 107-162 Access specifiers: 224-229
<b>Lecture 4</b>  More object oriented Inheritance Method overriding Constructors, more Method overloading Abstract classes Interfaces	Interface and imple: 231-232 Composition/inheritance: 241-256 Interfaces: 315-324
<b>Lecture 5</b>  Arrays String class Java i/o, streams, writers Exception handling	Init and cleanup: 165-179 Array initialization: 202-208 Exception: 372-375 Arrays: 453-458 Java inputstream, etc 594-597 I/O: 603-610
<b>Lecture 6</b>  Applets, html applet tag Swing and awt Lightweight, heavyweight containers Jar files and packages	Package: the library unit: 216-217 Applets: 768-773 Making a button: 779 Debugging: 978-984