



Computer Science/Information Technology

Java Programming Suite



About Sun Academic Advantage

Pearson and Sun Microsystems have partnered together to introduce the **Sun Academic Advantage (SAA)** - an offering of cutting edge educational courseware and instructional resources in disciplines such as software development, enterprise architecture, system administration and IT management. The SAA leverages Sun's expertise in emerging technologies and Pearson's wealth of content resources, proven instructional design and excellence in course development.

Areas covered by the SAA include **Java technology, JavaFX, Open Source, and Solaris**. Resources range from online courses, practice exams, lab manuals and certification maps.

Sun Academic Advantage Benefits

For Professors:

- Supports existing curricula and can be bundled with leading textbooks such as Liang, Deitel, and Gaddis or used independently as a stand-alone course
- Offers turn-key instructor resources and tools for easy classroom integration


For Students:

- For those interested in becoming Sun Certified, the courses provide a link between academic curriculum and Sun certification
- Provides a competitive edge to students preparing for careers in the field



Title		ISBN	Courses	Selections & Pedagogy	Additional Benefits
Java Programming I - CourseConnect Select		Individual & bundle ISBNs will be created per adoption.	» CS0110 / Java Programming	<ul style="list-style-type: none"> » A twelve module, 1st semester computer programming course using Sun's Java based on the fundamentals-first approach » Lesson topics are currently aligned to the following textbooks: <ul style="list-style-type: none"> • <i>Intro. to Java Programming, 7/e</i> by Y. Daniel Liang, ISBN 0136042589. • <i>Starting Out with Java: From Control Structures through Objects, 4/e</i> by Tony Gaddis, ISBN 0321479270. • <i>Java: How to Program, 8/e</i> by Deitel, ISBN: 0136123716. March 2010. • <i>Introduction to Java Programming, 8/e</i> by Y. Daniel Liang, ISBN 0132130793. » Core concepts include: Programming Fundamentals, Basic Problem Solving, Variables and Assignments, Math, Conditionals, Control Flow, Methods and Functional Abstraction, Objects and Data Abstraction, Inheritance and Polymorphism, Exception Handling, Graphical User Interfaces, and External Libraries 	<ul style="list-style-type: none"> » Online Textbook Access: each lesson integrates relevant textbook chapters, which are accessible online and provide students an easy reference while completing each lesson » Video Notes: step-by-step video tutorials specifically designed to enhance the programming concepts and allow students to view the entire problem-solving process outside of the classroom—when they need help the most. Relevant Video Notes are also referenced directly within programming assignments
Java Programming II - CourseConnect Select		Individual & bundle ISBNs will be created per adoption.	» CS0110 / Java Programming	<ul style="list-style-type: none"> » A twelve module, 2nd semester Java programming course » Lesson topics are currently aligned to the following textbooks: <ul style="list-style-type: none"> • <i>Introduction to Java Programming, Compr. 8/e</i> by Y. Daniel Liang, ISBN 0132130807. » Core concepts include: Review Tools, Interfaces and Arrays, Abstract Classes, Generics and Interfaces, Stacks, Queues, Binary Trees, Java Collections Framework, Sorting Algorithms, Graph Applications, Advanced GUIs and Graphics 	
Sun Certified Java Programmer Lab Manual		9780558237844	» CS0110 Java Programming	<ul style="list-style-type: none"> » Nine lab assignments includes review questions & comprehensive exercises with structured programming tasks » Supplements the Java Programming I CoCo course 	<ul style="list-style-type: none"> » Aligns with the objectives of Sun Certification for Java Programmer » Each lab includes pre-lab review questions and multi-object tasks
Sun Certified Java Programmer - Data Structures and Algorithms Lab Manual		9780558758219	» CS0110 Java Programming	<ul style="list-style-type: none"> » Twelve lab assignments includes review questions & comprehensive exercises with structured programming tasks » Aligns to the Java Programming II CoCo course 	
Sun Certified Java Programmer Practice Test		9780558171957	» CS0110 Java Programming	<ul style="list-style-type: none"> » A sixty question exam with answer key and explanations » Professors can utilize the practice test to provide additional concept questions for students » Students can self-test their comprehension of core concepts 	<ul style="list-style-type: none"> » The Practice Test allows students to prepare for the Sun Java Programmer certification by covering key exam topics in the format of the certification exam
Java Programming Certification Maps		9780558308926 (Deitel), 9780558330569 (Liang), 9780558330552 (Gaddis)	» CS0110 Java Programming	<ul style="list-style-type: none"> » Each certification map is mapped to chapters for each of the three textbooks below: <ul style="list-style-type: none"> • <i>Introduction to Java Programming, 7/e</i> Y. Daniel Liang (Comprehensive and Brief versions), ISBN: 0136042589; • <i>Java: How to Program, 8/e</i> by Deitel, ISBN: 0136053068; • <i>Starting Out with Java: From Control Structures through Objects, 4/e</i> by Tony Gaddis, ISBN: 032147927 	<ul style="list-style-type: none"> » Certification Maps help facilitate Sun Certification preparation by aligning exam topic objectives and requirements to the specific sections and pages of leading Java Programming textbooks

For additional information please visit: www.pearsonhighered.com/sunacademic



Introduction to Java FX

Title		ISBN	Courses	Selections & Pedagogy
Introduction to Programming with JavaFX		9780558437589	<ul style="list-style-type: none"> » CS0110 Java Programming » CS1163 Web Programming - Wireless/Mobile » CS0901 Computer Graphics - Intro » Introductory gaming development 	<ul style="list-style-type: none"> » A concise introduction to an emerging technology, this manual offers a step-by-step tutorial on how to use JavaFX™ designed for mobile devices. » Core concepts include: comparison of JavaFX™ to the standard Java programming language, animation composition in JavaFX™, preparation of the JavaFX™ programming environment by using JDK, NetBeans, and JavaFX™, evaluation of additional JavaFX™ tools, generate applications by building, compiling, and executing, and construction of a GUI layout by using “Scenes” and “Objects”

History of Java & History Open Source

Title		ISBN	Courses	Selections & Pedagogy
The History and Evolution of Java - CourseConnect Express		Unique course & bundle ISBNs will be created per adoption.	<ul style="list-style-type: none"> » CS1407 Introduction to Computer Science » CS1111 Internet / World Wide Web » CS0110 Java Programming 	<ul style="list-style-type: none"> » This interactive 5 module online course is designed for simple, modular integration into existing curricula » Students will learn how Java evolved into the world’s most powerful platform for software development » Core concepts include an overview of Java’s initial release and its evolution, Java’s impact on computing, the contributions by key individuals and groups toward Java’s development, Java’s role in the Open Source software movement, and Java’s role in cutting edge technologies
The History and Evolution of Open Source - CourseConnect Express		Unique course & bundle ISBNs will be created per adoption.	<ul style="list-style-type: none"> » CS1407 Introduction to Computer Science » CS1111 Internet / World Wide Web » CS1412 Computer Ethics » CS1140 Electronic Commerce: Business Issues 	<ul style="list-style-type: none"> » This interactive 3 module online course is designed for simple, modular integration into existing curricula » Student will learn about the open source movement and its impact on the business of technology » Core concepts include: an overview and history of the Open Source movement, the three waves of the Open Source movement and the key individuals and organizational contributors, the business benefits and challenges of Open Source software, the accomplishments and mission of Open Source Communities, OS communities common characteristics and guidelines for successful participation

Open Solaris

Title		ISBN	Courses	Selections & Pedagogy
Sun Certified Solaris Associate Practice Test		9780558171964		<ul style="list-style-type: none"> » A sixty question exam with answer key and explanations to prepare students for Sun Solaris Associate certification by covering key exam topics in the format of the exam and its questions » Students who are not planning to complete the certification exam have the ability to self-test their comprehension of core concepts
Sun Certified Solaris System Administrator Practice Test		9780558171971		<ul style="list-style-type: none"> » A sixty question exam with answer key and explanations to prepare students for Sun Solaris System Administrator certification by covering key exam topics in the format of the exam and its questions » Students who are not planning to complete the certification exam have the ability to self-test their comprehension of core concepts

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