

Data Structures, Algorithms Online Self-paced Class

[Robert Cook](#)

TEXT: [Advanced Java Programming with Data Structures](#), Kindle Reader eBook, Robert Cook, Amazon, \$10
 (Download a Kindle Reader from Amazon for PC or Mac, phones too)
 (Follow directions in the book to get a copy of the examples)

Description: Algorithm Design and Analysis, An in-depth study of the design, implementation, testing, and analysis of algorithms.

The grading scale is 90-100 (A) etc.

50%-Assignments (in Java, use [Eclipse Programming Environment](#) or an online IDE, such as [Doodle](#))

30%-Examinations

20%-Semester project (can be in any language)

PROJECT TOPIC MUST BE APPROVED IN ADVANCE

Week	Reading & Lectures	Assignment Deadlines
One	Saturday,Sunday	
	Read: Chapter One, Two <u>READ ME FIRST</u>	Non-working programs count as zero.
	<u>Lecture 1-2</u>	Late programs count as zero.
Two	Saturday,Sunday	<u>PROGRAMS 1, 2, 3, 5, 8</u>
	Read: Chapter Three	If you already completed the above programs to test out of Java, you must choose a substitute problem from one of the <u>ACM Intl. Programming Contest web sites</u> . Turn in the problem description, program listing, input and output to receive credit.
	Lecture <u>3-1</u> , <u>3-2</u> , <u>3-3</u>	
Three	Saturday,Sunday	<u>PROGRAMS 6, 7, 8, 10</u>
	Read: Chapter Three	
	Lecture <u>3-4</u> , <u>3-5</u> , <u>3-6</u>	
Four	Saturday,Sunday	PROGRAMS <u>11,12, 13, 14, 15</u>
	Read: Chapter Three	
	Lecture <u>3-7</u> , <u>3-8</u>	
Five	Saturday,Sunday	

	MID-TERM EXAM	Covers Chapters 1, 2 and up through 3-5. See the Study Guide . One page of notes is allowed.
Six	Saturday, Sunday	PROGRAMS 16, 17 , Semester project topic deadline
	Read: Chapter Four	
	Lecture 4-1 , 4-2	
Seven	Saturday, Sunday	PROGRAMS 18, 19
	Read: Chapter Four	
	Lecture 4-3 , 4-4	
Eight	Saturday, Sunday	PROGRAMS 20, 21, 22
	Read: Chapter Four	
	Lecture 4-5 , 4-6 , 4-7	
Nine	Saturday, Sunday	PROGRAMS 23, 24, 25
Ten	Saturday, Sunday	
		Semester Project due.
Eleven	Saturday, Sunday	Final Project due
	FINAL EXAM	Study Guide