

# Elementary Data Structures and Algorithms

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CS 2401 – Spring 2020

module	week	topics	book sections/zybook homework
Fundamentals	1	1-D Arrays, Loops, String Manipulation	3.1–3.4, 17.14–17.15
	2	Unit Testing, 2-D Arrays	3.5–3.9, 4.5
	3	Algorithm Analysis of Loops, Methods	5.4–5.5, 6.1–6.3
	4	Midterm Exam 1	Catch-Up Homework
Algorithms	5	Recursion, Binary Search	5.1–5.3, 6.1–6.3
	6	Sorting	5.9–5.20
Data Structures	7	Linked Lists	11.1–11.10
	8	Midterm Exam 2	Catch-Up Homework
	9	Inheritance, Doubly Linked Lists	10.1–10.3, 11.11–11.15
	10	Trees, Binary Trees, Binary Search Trees	12.1–12.6
	11	Stacks, Queues	13.1–13.6
	12	Stack & Queue Implementation	
	13	Midterm Exam 3	Catch-Up Homework
	14	Miscellaneous	
	15	Final Exam Review	