Course Syllabus
COMP 511 - Computer Programming Foundations II
Spring 2024

Instructor	Abdulrahman Alshammari (Abdul)		
Website	https://abdulrahman.netlify.app	Email	aalsha2@gmu.edu
Lecture Time	Tuesday, 7:20pm - 10:00pm	Lecture Location	Innovation Hall 222
Office Hours	Wed 5:30 PM - 6:30 PM (Zoom) or by Appointment		

Course Description

Study of the fundamentals of data structures and algorithms applied in programming solutions to application problems. The course stresses programming in a modern high-level language.

Prerequisites

The prerequisite for this course is COMP-501 or its equivalent. You should have a semester's worth of basic programming in Java, including program design, coding, and debugging techniques.

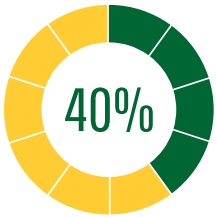
Textbooks

Mark Allen Weiss, Data Structures & Problem Solving Using Java, Addison-Wesley (4th)

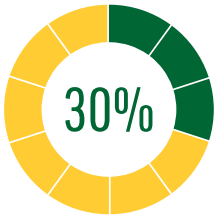
Course Topics

Topic	Textbook Chapter(s)
Java – review of selected topics	1-4
Algorithms Analysis	5
Recursion, Sorting Algorithms	7,8
Array, ArrayList, Stacks, Queue	15,16
Linked Lists	17
Trees	18
Binary Search Tree, B-Trees	19
Hash Tables	20
Graphs	14
Huffman Encoding	12.1
Special Topics	TBD

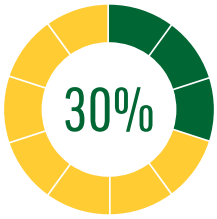
Grading Policy



4 Java Homeworks



Midterm Exam



Final Exam

A+	A	A-	B+	B	C	D
>=97	>=90	>=88	>=85	>=80	>=70	>=60

Course Timeline

Jan 30	Feb 20	March 12	March 19	April 2	April 23	May 7
HW 1 (Assigned)	HW 1 (Due) HW 2 (Assigned)	Midterm Exam	HW 2 (Due) HW 3 (Assigned)	HW 3 (Due) HW 4 (Assigned)	HW 4 (Due)	Final Exam

Honor Code

- The class enforces the GMU Honor Code. Violations of academic honesty will NOT be tolerated.
- Both the University and the Computer Science Department have honor codes you are expected to adhere to: https://oai.gmu.edu/mason-honor-code/ and http://cs.gmu.edu/resources/honor-code/. You are bound by these honor codes.

Disability Statement

If a disability or other condition affects your academic performance, please document it with the Office of Disability Services.

Homework Policy

For this class homework and exams require individual work. Study groups are encouraged, but homework solutions and write-ups MUST be the result of individual effort. Similarly, study groups for examinations are encouraged. However, exams are individual effort and closed book.