

CSIS 2610 - Programming and Problem-Solving

Fall 2026 Syllabus, Section 04, CRN 41040,

Credit hours: 3

Instructor

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Public Instructor Information

Instructor Title: Lecturer

Instructor Professional Qualifications:

M.Sc. in Computer Science, University of Louisiana at Lafayette, 2025.

B.Sc. in Computer Science & Engineering, Islamic University of Technology, 2015.

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Course Description

2610. Programming and Problem-Solving. Problem solving methods and algorithms using a high-level programming language. Designing, coding, debugging, and documenting programs using techniques of good programming style. Credit will not be given for both CSIS 2610 and CSIS 1595 or CSIS 2605. Prereq.: MATH 1513 or Math Level 45. Coreq.: CSIS 2610L. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Starting out with C++ from Control Structures through Objects (10th edition), Pearson	Tony Gaddis	9780137450626

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapter 1 Chapter 2	Syllabus review Introduction to C++ Computer architecture overview Basic input, output and processing Variable and assignment Data types Operators & Expressions Primitives	
8/31	Chapter 3	Type casting and conversion Console input Output formatting	



9/7	Chapter 3 Chapter 4	Relational operator if-else statement Mathematical expressions
9/14	Chapter 4	Nested if-else Switch statement Comparing characters & strings Input validation
9/21	Chapter 5	Loop Nested Loop
9/28	Chapter 6	Defining & calling function Passing value Global and local variable Midterm
10/5	Chapter 6	Recursive function Returning value from function Reading and writing into text file File I/O
10/12	Chapter 7	Arrays Vector Multi dimensional array
10/19	Chapter 8	Searching Sorting
10/26	Chapter 9	Pointers Dynamic memory allocation
11/2	Chapter 9 Chapter 10	Pointer arithmetic Pointer as function parameter String
11/9	Chapter 10	String manipulation Character/numeric conversion
11/16	Chapter 11	Structures
11/23	Chapter 13 Chapter 14	Introduction to OOP Constructors Destructors
11/30	Chapter 15	Inheritance Polymorphism Virtual functions Final exam

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.