

CSCI 6901 - Principles of Computer Programming

Fall 2026 Syllabus, Section 01, CRN 40908,

Credit hours: 3

Instructor

Angello Astorga

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Public Instructor Information

Instructor Title: Part-Time Faculty

Instructor Professional Qualifications:

Ph. D., Computer Science, University of Illinois Urbana-Champaign, 2024

Bachelor's, Computer Science and Engineering, The Ohio State University, 2015

Instructor Office Location: Meshel Hall 324

Instructor Office Phone: 330-941-3289

Course Description

6901. Principles of Computer Programming. Significant features of several computer programming languages to fit the needs of graduate students with no previous computer science experience. Programming techniques and problem analysis. Students will do programming projects appropriate for their needs. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Big C++	Cay Horstmann	979-8-203-32600-3
Optional	C++ Primer (5th Edition)	Lippman, Lajoie and Moo	0-321-71411-3
Optional	Starting Out with c++ from Control Structures to Objects	Tony Gaddis	978-0136662419

The **required book (Big C++)** is available at learn.zybooks.com with zyBooks code YSUCSCI6901AstorgaFall2026 (\$94);

The following **supplemental textbooks** are recommended for students who would like additional resources:

- **For more advanced material:** *C++ Primer* (5th Edition)
- **For more introductory material:** *Starting Out with C++: From Control Structures through Objects*

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

Tentative Course Schedule

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapter 1	Introduction	PA 1
8/31	Chapter 2	Fundamental Data Types	PA 2
9/7	Chapter 3	Decisions -- Control Structures I	PA 3
9/14	Chapter 4	Loops (Repetition) -- Control Structures II	PA 4
9/21	Chapter 5	Functions (Midterm 1)	PA 5
9/28	Chapter 5	Functions (Continued)	PA 5b
10/5	Chapter 6	Arrays and Vectors	PA 6
10/12	Chapter 7	Pointers and Structures	PA 7



10/19	Chapter 12	Sorting and Searching	PA 12
10/26	Chapter 9	Streams	PA 9
11/2	Chapter 7	Classes	PA 7
11/9	Chapter 7 and Provided by Instructor	Classes II	PA 7b
11/16	Provided by Instructor	Testing	PA Testing
11/23	Provided by Instructor	Components	PA Components
11/30	Provided by Instructor	AI	PA AI
12/7	Scheduled by University (See additional information)		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.