

 FLORIDA ATLANTIC UNIVERSITY	NEW COURSE PROPOSAL Undergraduate Programs		UUPC Approval _____
	Department College <i>(To obtain a course number, contact erudolph@fau.edu)</i>		UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
Prefix Number	<i>(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)</i> Lab C Code	Type of Course	Course Title
Credits <i>(See Definition of a Credit Hour)</i>	Grading <i>(Select One Option)</i> Regular Sat/UnSat	Course Description <i>(Syllabus must be attached; see Template and Guidelines)</i>	
Effective Date <i>(TERM & YEAR)</i>			
Prerequisites, with minimum grade*		Corequisites C	Registration Controls <i>(Major, College, Level)</i>
*Default minimum passing grade is D-. Prereqs., Coreqs. & Reg. Controls are enforced for all sections of course			
WAC/Gordon Rule Course Yes No WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to proposal. See WAC Guidelines .		Intellectual Foundations Program (General Education) Requirement <i>(Select One Option)</i> General Education criteria must be indicated in the syllabus and approval attached to the proposal. See Intellectual Foundations Guidelines .	
Minimum qualifications to teach course Masters in Computer Science or a related field			
Faculty Contact/Email/Phone		List/Attach comments from departments affected by new course	
Approved by Department Chair <u>Haik Kalva</u> College Curriculum Chair <u>Hongbo Su</u> College Dean <u>[Signature]</u> UUPC Chair _____ Undergraduate Studies Dean _____ UFS President _____ Provost _____			Date _____ 2/12/2024 _____ 3/13/2024 _____ 2/14/24 _____ _____ _____

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

COP 3274C

Systems Programming with C++

DAY X – X
3 credits

Fall 2024
Prof. XXXXX YYYYY
Office: XXXXX
Office hours: DAY X-X
Classroom: XXXX
Telephone: 561-297-XXXX
Email: zzzzz@fau.edu



TA name	xxxxxx xxxxxxxxx
Office	xxxxxxx
Office hours	DAY xx:xx – xx:xx
Telephone	561-297-xxxx
Email	xxxxxx@fau.edu

Course Description

This course builds on the foundations of programming skills, with an introduction to C++, and emphasizes on design, coding, memory management, and object-oriented class design and implementation.

Instructional Method

In-Person. There is no remote option for this course.

Prerequisites

COP 3035 – Introduction to Programming in Python with a minimum grade of C

Corequisites

CEN 3062C – Introduction to Software Design

Course Objectives/Student Learning Outcomes

This class is designated as “In-Person w/Recorded Lecture” (section XXX) or “Videotaped Class” (section YYY). In-person class sessions will be automatically recorded and uploaded to Canvas within 24 hours. Student enrolled in section XXX may choose to attend in-person classes or view recordings, whereas students enrolled in section YYY are only able to view recordings.

Course Evaluation Method

Include a breakdown of the graded course components and their weight in determining the overall course grade (e.g. Midterm exam--20%, Essay #1--15%, Attendance and Participation--10%, etc.). Students are entitled to know how they are progressing in a course based on the individual grades received. If you have a policy about how unexcused class absences will affect the final grade,

clearly state your policy. Please note that the University Provost, in order to identify and assist students at academic risk, requests that courses with freshmen have graded assignments well before midterm. If applicable, also note the minimum grade required to pass the course (if not a “D-“).

Course Grading Scale

Grade	Total (%)
A	[93 – 100]
A-	[90 – 92)
B+	[87 – 89)
B	[83 – 86)
B-	[80 – 82)
C+	[77 – 79)
C	[73 – 76)
C-	[70 – 72)
D+	[67 – 69)
D	[63 – 66)
D-	[60 – 62)
F	[0 – 59)

Policy on Makeup Tests, Late Work, and Incompletes (if applicable)

Late work will not be accepted. All assignments will be posted well in advance, and students may submit assignments early. Any assignment not turned in by the due date will result in a zero.

Incomplete grades are against the policy of the department, and they will only be assigned if there is solid evidence of medical or otherwise serious emergency situation.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University’s Student Code of Conduct and/or the Code of Academic Integrity.

Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal

obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Required Texts/Readings

Walter Savitch, Problem Solving with C++, by Walter Savitch. 2012.

Course Topical Outline

C basics, basic program formatting/documentation standards
Basic machine architecture and terminology: compilation, linking, RAM, OS, etc.
C++ I/O, simple classes (private and public) and types
If/else, operators, value-returning functions, more on classes and members
Program design: top-down and bottom-up designs
Iteration: scope
Documentation standards
Class design and implementation
Abstract Data Type (ADT)

Standard Template Library (STL)
Streams, reference parameters
Arrays, VECTOR class
Recursion, sorting
Pointers, linked lists, dynamic memory allocation
Function and operator overloading
Function and class templates

Systems Programming Lab

Lab component of the course will have weekly practice sessions that cover development tools and practical exercises in systems programming.