	COURSE CHANGE REQUEST Undergraduate Programs	UUPC Approval 10-11-21
FAU **FLORIDA ATLANTIC UNIVERSITY**	**Department** Electrical Eng. and Comp Science **College** Engineering and Computer Science	UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____

Current Course Prefix and Number	COP 3014	*Current* Course Title Foundations of Computer Science

*Syllabus must be attached for **ANY** changes to current course details. See Checklist. Please consult and list departments that may be affected by the changes; attach documentation.*

Change title to: Programming II	Change description to: See attached syllabus for new course description.
Change prefix From: To:	
Change course number From: To:	**Change prerequisites/minimum grades to:**
Change credits* From: To:	
Change grading From: To:	**Change corequisites to:**
Change WAC/Gordon Rule status** Add ☐ Remove ☐	**Change registration controls to:**

Change General Education Requirements***
    Add ☐   Remove ☐
  *Review Provost Memorandum
 **WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines.
***General Education criteria must be indicated in syllabus and approval attached to this form. See GE Guidelines.
	Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).

Effective Term/Year for Changes:	Spring 2022	**Terminate course? Effective Term/Year for Termination:**

Faculty Contact/Email/Phone Hanqi Zhuang, zhuang@fau.edu, 561-297-3413

Approved by		*Date*
Department Chair	_(signature)_	9/23/2021
College Curriculum Chair	Dan Meeroff	10-4-21
College Dean	Fred Bloetscher	10-4-21
UUPC Chair	Dan Meeroff	10-11-21
Undergraduate Studies Dean	Edward Pratt	10-11-21
UFS President		
Provost		

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

1. Course title/number, number of credit hours	
Programming II - COP3014	3 credit hours

2. Course prerequisites, corequisites, and where the course fits in the program of study	
Prerequisite: COP 2220	

3. Course logistics

Term: TBD
Class location and time:

4. Instructor contact information	
Instructor's name *Office address* *Office Hours* *Contact telephone number* *Email address*	TBD

5. TA contact information	
TA's name *Office address* *Office Hours* *Contact telephone number* *Email address*	TBD

6. Course description

This course covers the fundamentals of object-oriented programming using the C++language. Introduces object-oriented principles such as abstraction, composition, classes, objects, inheritance, polymorphism, and interfaces. Other topics covered in the context of solving problems include Standard Template Libraries, iterators and collections, lambda expressions, and elements of functional programming.

7. Course objectives/student learning outcomes/program outcomes

Course objectives	The course will provide a good understanding of the C++ programming language. The student will learn good programming principles and proper use of the C++ language. The material learned in this course is fundamental for the computer science and computer engineering programs. The programming assignments will provide valuable experience with programming in C++, designing classes, implementation, testing and debugging.
Student learning outcomes & relationship to ABET 1-7 CE-EE outcomes	1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. **(Problem solving)** 6. Apply computer science theory and software development fundamentals to produce computing-based solutions. **(software development)**

Student learning outcomes & relationship to ABET 1-7 CS outcomes	1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. **(Problem solving)**
	2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline. **(Design)**
	6. Apply computer science theory and software development fundamentals to produce computing-based solutions. **(software development)**

8. Course evaluation method

Computer Projects - 20 Quizzes - 20% Examinations - 60%		*Note*: The minimum grade required to pass the course is C.

9. Course grading scale

Grading Scale:
90 and above: "A", 87-89: "A-", 83-86: "B+", 80-82: "B", 77-79 : "B-", 73-76: "C+", 70-72: "C", 67-69: "C-", 63-66: "D+", 60-62: "D", 51-59: "D-", 50 and below: "F."

10. Policy on makeup tests, late work, and incompletes

Makeup tests are given only if there is solid evidence of a medical or otherwise serious emergency that prevented the student from participating in the exam. Makeup exam should be administered and proctored by department personnel unless there are other pre-approved arrangements

Late work is not acceptable.

Incomplete grades are against the policy of the department. Unless there is solid evidence of a medical or otherwise serious emergency situation incomplete grades will not be given.

11. Special course requirements

TBD

12. Classroom etiquette policy

University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions.

13. Attendance policy statement

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.

14. Disability policy statement

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/.

15. 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/

16. Code of Academic Integrity policy statement

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. If your college has particular policies relating to cheating and plagiarism, state so here or provide a link to the full policy—but be sure the college policy does not conflict with the University Regulation.

17. Required texts/reading

TBD

18. Supplementary/recommended readings

TBD

19. Course topical outline, including dates for exams/quizzes, papers, completion of reading

- Classes
- Pointers and References
- Dynamic Memory Use and Template Types
- Operator Overloading, Unit Testing, Debugging
- Text and Binary File I/O
- Inheritance and Polymorphism, Virtual Methods/Classes (Interfaces), Overriding Methods
- Abstract Base Classes, Class Hierarchies, Substitution Principle
- Libraries and Maps,

- Iterators and Collections
- Lambda Expressions and Elements of Functional Programming