

# **COURSE CHANGE REQUEST Undergraduate Programs**

**Department** Electrical Engineering and Comp Science

UUPC Approval 10-11-21
UFS Approval
SCNS Submittal
Confirmed
Banner Posted
Catalog

Current Course Prefix and Number Programming Languages 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: Principles of Programming Languages Change prefix From: To: Change course number From: To: Change credits* From: To: Change grading From: To: Change grading From: To: Change WAC/Gordon Rule status** Add Remove Change General Education Requirements** Add Remove Change General Education Requirements** Add Remove The see WAC Gooden Rule or tieria must be indicated in syllabus and approval attached to this form. See Ge Guidelines.  From: Spring 2022 Feffective Term/Year for Changes: Ffective Term/Year for Changes: From: Spring 2022 Feffective Term/Year for Changes: From: Spring 2022 Feffective Term/Year for Changes: From: Spring 2022 Feffective Term/Year for Changes: From: Spring 2022 Ferminate course? Effective Term/Year for Termination: Faculty Contact/Email/Phone Hanqi Zhuang, zhuang@fau.edu, 561-297-3413  Approved by Department Chair College Dean Field Blostacher UUPC Chair  Dan Massaff Undergraduate Studies Dean Education Pratt UFS President  UFS President  Change scription to:  Change description to:  See attached syllabus for new course description.  Change description to:  Change prerequisites/minimum grades to: (COP 3530 or COP 3410) and COT 4420 with "C" or better  Change corequisites to:  Remove COT 4420 as a corequisite  Change registration controls to:  Change registration controls to:  Change registration controls to:  Terminate course? Effective Term/Year for Termination: Faculty Contact/Email/Phone Hanqi Zhuang, zhuang@fau.edu, 561-297-3413  Approved by Department Chair College Dean Field Blostacher UUPC Chair  Dan Massaff Undergraduate Studies Dean Education Pratt UPS President  UPS President	UNIVERSITY College Engineering and Compi	College Engineering and Computer Science				
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Email this form and syllabus to <a href="mailto:mjenning@fau.edu">mjenning@fau.edu</a> seven business days before the UUPC meeting.

# Department of Electrical Engineering and Computer Science Florida Atlantic University Course Syllabus

1. Course title/number, number of credit hours						
Principles of Programming La	Principles of Programming Languages -COP 4020			3 credit hours		
2. Course prerequisites, core	2. Course prerequisites, corequisites, and where the course fits in the program of study					
Prerequisite: (COP 3530 or CC	OP 3410) and COT 4420	o with "C" or b	etter			
3. Course logistics						
Term: TBD Class location and time:						
4. Instructor contact informa	ation					
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						
Programming language representation, translation, and execution (compiled, interpreted); recursive-descent parsing; type systems (static/dynamic, strong/weak); parameter passing; memory management (static/dynamic); programming paradigms: procedural, object-oriented, functional, concurrent.						
7. Course objectives/student learning outcomes/program outcomes						
Course objectives TBD  Student learning outcomes TBD  & relationship to ABET 1-7 outcomes						
8. Course evaluation method	d					
Homework (5 total, 15% each Final paper	n) 75% Hands-on data analysis in R 25% Written report of a data analysis project					
9. Course grading scale						
A A- B+ [90-100] [87-90) [83-87) [8	B B- C+ 30-83) [77-80) [73-77	C ') [70-73) [6	C- D+ 57-70) [63-67) [6	D D- F 60-63) [51-60) [0-51)		
10. Policy on makeup tests,	10. Policy on makeup tests, late work, and incompletes					

# Department of Electrical Engineering and Computer Science Florida Atlantic University Course Syllabus

#### Late Assignments Policy -

Make-up Policy for Tests: Makeup tests are given only if there is solid evidence of a medical or otherwise serious emergency that prevented the student of participating in the exam.

Incomplete Grade Policy Incomplete grades are against the policy of the department. Unless there is solid evidence of medical or otherwise serious emergency situation and the student is currently passing the class, incomplete grades will not be given.

#### 11. Special course requirements

N/A

# 12. Classroom etiquette policy

To enhance and maintain a productive atmosphere for learning, personal communication devices such as cell phones are to be disabled during 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. After two full weeks of face-to-face instruction with consecutive 'no show' of any students in person in the classroom, the modality of this course section may be changed to remote instruction only at the discretion of the university.

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 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 <a href="https://www.fau.edu/sas/">www.fau.edu/sas/</a>.

### 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 <a href="https://www.fau.edu/counseling/">https://www.fau.edu/counseling/</a>.

#### 16. Code of Academic Integrity policy statement

# Department of Electrical Engineering and Computer Science Florida Atlantic University Course Syllabus

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.

#### 17. Required texts/reading

Textbook: No textbook required; reading materials provided by instructor

# 18. Supplementary/recommended readings

TBD

#### 19. Course topical outline (and associated readings)

- Syntax definition
- Context-free grammars, production rules
- Parsing and translation
- Recursive-descent parsing
- Execution models (compiled versus interpreted)
- Type systems (static versus dynamic, strong versus weak)
- Dispatch (static versus dynamic)
- Parameter passing modes (name, value, reference)
- Memory management (static, dynamic)
- Memory heaps
- Garbage collection
- Paradigm: procedural
- Paradigm: object-oriented
- Paradigm: functional
- Paradigm: concurrent / reactive