

 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Undergraduate Programs		UUPC Approval <u>3-29-21</u> UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department Comp & Electrical Eng and Comp Science College Engineering and Comp Science		
Current Course Prefix and Number CDA 4102		Current Course Title Structured Computer Architecture	
<i>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.</i>			
Change title to: Change prefix From: _____ To: _____ Change course number From: _____ To: _____ Change credits* From: _____ To: _____ Change grading From: _____ To: _____ Change WAC/Gordon Rule status** Add <input type="checkbox"/> Remove <input type="checkbox"/> Change General Education Requirements*** Add <input type="checkbox"/> Remove <input type="checkbox"/> <small>*Review Provost Memorandum</small> <small>**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines.</small> <small>***General Education criteria must be indicated in syllabus and approval attached to this form. See GE Guidelines.</small>		Change description to: Change prerequisites/minimum grades to: CDA 3201C or COT 2004 Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).	
Effective Term/Year for Changes: Fall 2021		Terminate course? Effective Term/Year for Termination:	
Faculty Contact/Email/Phone Hari Kalva, hkalva@fau.edu			
Approved by Department Chair <u>Hanqi Zhuang</u> <small>Digitally signed by Hanqi Zhuang Date: 2021.01.17 15:07:38 -05'00'</small> College Curriculum Chair <u>[Signature]</u> College Dean <u>[Signature]</u> UUPC Chair <u>[Signature]</u> Undergraduate Studies Dean <u>Edward Pratt</u> UFS President _____ Provost _____		Date _____ <u>3-10-21</u> <u>3/11/21</u> <u>3-29-21</u> <u>3-29-21</u> _____ _____	

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

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

1. Course title/number, number of credit hours	
Structured Computer Architecture – CDA 4102 001 – CRN 11601 002 – CRN 11602	3 credit hours
2. Course prerequisites, corequisites, and where the course fits in the program of study	
CDA 3201 C or COP 2004	
3. Course logistics	
<p><i>Term:</i> Summer 2020</p> <p>The course content will be delivered within the first 8 weeks of Term 1.</p> <p><i>Class location and time:</i> The class sessions will be conducted through Webex on Tuesdays and Thursdays from 3:00 to 4:35 PM. Students are welcome and encouraged to participate. The recorded sessions will be posted on Canvas. An additional 50-minute lecture will be recorded and posted on canvas every week.</p> <p>The examinations will be open book, and open notes.</p> <p>Here are a few other logistics:</p> <ol style="list-style-type: none"> 1. Materials/announcements will be regularly posted on Canvas. It is students' responsibility to regularly check Canvas and their FAU email for the most recent information. 2. No hard-copy handouts will be provided. Copies will be posted in appropriate modules on Canvas. 3. Students need a reliable internet connection. 4. Students should have an operational computer system equipped with Windows 10 or macOS Sierra (or higher), Microsoft Office, web browser, a webcam, speakers, and microphone. 5. More information about exams will be provided as we get closer to the exams. You must be able to scan answers and upload them to Canvas. Please test this BEFORE the exam. 6. Students are encouraged to ask questions through Canvas, so other students also benefit from the answers. Personal or confidential matters should be sent via email to the professor. 	
4. Instructor contact information	
<i>Instructor's name</i> <i>Office address</i> <i>Office Hours</i> <i>Contact telephone number</i> <i>Email address</i>	Dr. I. Mahgoub, Tecore Endowed Chair Professor Engineering East Bldg., Room 421 T R: 1:00 – 2:30 PM, or by appointment 561-843-9794 (cell) mahgoubi@fau.edu
5. TA contact information	
<i>TA's name</i> <i>Office address</i> <i>Office Hours</i> <i>Contact telephone number</i>	TBD

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

<i>Email address</i>	
6. Course description	
A multilevel approach to computer architecture: microarchitecture level, instruction set architecture level, and operating system level. Introduction to parallel computer architectures.	
7. Course objectives/student learning outcomes/program outcomes	
<i>Course objectives</i>	This course is designed to teach the fundamental concepts of computer architecture and organization using a multilevel design approach
<i>Student learning outcomes & relationship to ABET 1-7 objectives</i>	<ol style="list-style-type: none"> 1. An ability to identify, formulate, and solve complex computing/engineering problems by applying principles of computing, engineering, science, and mathematics. (Problem solving) 2. An ability to apply the computing/engineering design process to produce solutions that meet a given set of computing/engineering requirements with consideration for public health and safety, and global cultural, social, environmental, economic, and other factors as appropriate to the discipline. (Design)
8. Course evaluation method	
Project -	12%
Homework -	10%
3 Tests -	78%
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	
<p><i>Makeup tests</i> 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</p> <p><i>Late work</i> is not acceptable.</p> <p><i>A grade of incomplete will be assigned only in the case of solid evidence of medical or otherwise serious emergency situation.</i></p>	
11. Special course requirements	
None	
12. Classroom etiquette policy	

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

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
Andrew Tanenbaum, <i>Structured Computer Organization</i> , 6th ed., Prentice Hall 2013
18. Supplementary/recommended readings
None

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

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

1. Preliminaries
2. Computer systems organization: CPU, main memory, secondary memory, I/O
3. Micro-programming: an example microarchitecture, improving performance
4. Instruction set architecture: instruction formats and types, addressing
5. Operating system machine level: virtual memory, virtual I/O instructions
6. Parallel computer architectures: multiprocessors, multi-computers, INs

Tentative Test Dates:

Test # 1: Thursday, June 4, 2020

Test # 2: Thursday, June 18, 2020

Test # 3: Thursday, July 2, 2020