Fau

FLORIDA ATLANTIC UNIVERSITY

NEW COURSE PROPOSAL Graduate Programs

Department Electrical Engineering and Computer Scence

College Engineering and Computer Science (To obtain a course number, contact **erudolph@fau.edu**)

UGPC Approval
UFS Approval
SCNS Submittal
Confirmed
Banner
Catalog

Prefix CAP Number 6109	(L = Lab Course; C = Combined Lecture/Lab; add if appropriate) Lab Code	Type of Course Lecture	Course Title Human Compu	iter Interaction
Credits (See Definition of a Credit Hour) 3 Effective Date (TERM & YEAR) Fall 2024	Grading (Select One Option) Regular Sat/UnSat	Course Description (Syllabus must be attached; see Template and Guidelines) Through a blend of theoretical exploration and hands-on application, participants will gain a deep understanding of user-centered design, usability principles, and the latest advancements in HCI research. The course encourages iterative design thinking, prototyping, and evaluation, empowering students to create user interfaces and experiences that prioritize usability and accessibility. Engaging in group discussions, assignments, and a comprehensive course project, students will hone their ability to ideate, propose and solve design problems, critically evaluate existing practices, and communicate their design solutions effectively.		
Prerequisites graduate standing Prerequisites, Corequisite Controls are enforced for				must be indicated in syllabus and Registration Controls (For example, Major, College, Level)
Minimum qualifications needed to teach course: Member of the FAU graduate faculty and has a terminal degree in the subject area (or a closely related field). Faculty Contact/Email/Phone		List textbook information in syllabus or here List/Attach comments from departments affected by new course		
Michael DeGiorgio / mde	giorg@fau.edu / 561-297			

Approved by	Date
Department Chair Hackdra	3/11/2024
College Curriculum Chair Masoud Jahandar Lashaki	7/29/2024
College Dean Cardei	7/29/2024
UGPC Chair	
UGC Chair	
Graduate College Dean	
UFS President	
Provost	

Email this form and syllabus to $\underline{\text{UGPC@fau.edu}}\ 10$ days before the UGPC meeting.



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

Course Description

Through a blend of theoretical exploration and hands-on application, participants will gain a deep understanding of user-centered design, usability principles, and the latest advancements in HCI research. The course encourages iterative design thinking, prototyping, and evaluation, empowering students to create user interfaces and experiences that prioritize usability and accessibility. Engaging in group discussions, assignments, and a comprehensive course project, students will hone their ability to ideate, propose and solve design problems, critically evaluate existing practices, and communicate their design solutions effectively.

Instructional Method

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

Prerequisites

Graduate standing

Course Objectives/Student Learning Outcomes

Upon completion of this course the student will be able to:

- Understand user-centered design
- Perform prototyping and evaluation of user interfaces
- Consider usability and accessibility when designing interfaces

Course Evaluation Method

Attendance/Class participation	15%
Course project	30%
Exam	20%

Assignments	35%
Total	100%

Course Grading Scale

Grade	Total (%)	
A	[93 - 100]	
A-	[90 - 92)	
B+	[87 - 89)	
В	[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

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 <u>University Regulation 4.001</u>.

Required Texts/Readings

Related papers and reading materials will be distributed over Canvas.

Course Topical Outline

Foundations of HCI

Overview of Human-Computer Interaction

Historical perspectives and milestones

User-Centered Design

Understanding user needs

Design principles and heuristics

Prototyping and Iterative Design

Prototyping techniques

User feedback and iteration

Evaluation Techniques

Usability testing
Metrics and analytics
Cutting-Edge Research in HCI
Emerging trends
Ethical considerations