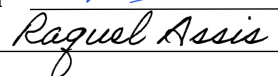


 FLORIDA ATLANTIC UNIVERSITY	NEW COURSE PROPOSAL Graduate Programs		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner _____ Catalog _____	
	Department College (To obtain a course number, contact erudolph@fau.edu)			
Prefix Number	(L = Lab Course; C = Combined Lecture/Lab; add if appropriate) Lab Code	Type of Course	Course Title	
Credits (See Definition of a Credit Hour) Effective Date (TERM & YEAR)	Grading (Select One Option) Regular Sat/UnSat	Course Description (Syllabus must be attached; see Template and Guidelines)		
Prerequisites <i>Prerequisites, Corequisites and Registration Controls are enforced for all sections of course.</i>		Academic Service Learning (ASL) course Academic Service Learning statement must be indicated in syllabus and approval attached to this form.		
		Corequisites	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).		List textbook information in syllabus or here		
Faculty Contact/Email/Phone		List/Attach comments from departments affected by new course		

Approved by Department Chair  College Curriculum Chair  College Dean  UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____	Date 8/26/2025 8/26/2025 8/26/25 _____ _____ _____ _____ _____
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Email this form and syllabus to UGPC@fau.edu 10 days before the UGPC meeting.

COP 5048

Foundations of Programming for Non-majors

MWF 11:00 – 11:50
3 credits

Semester, Year
Prof. XXXXX YYYYY
Office: XXXXX
Office hours: MWF 11-12
Classroom: XXXX
Telephone: 561-297-XXXX
Email: zzzzz@fau.edu



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

Course Description

This course introduces concepts in computer programming for non-majors using the Python programming language. Students will learn foundational topics, including a brief history of computing and programming, data handling and data types, collections of values, decision and repetition structures, and modular and object-oriented design. Use of common third-party libraries will be covered. Students may not enroll in COP 5048 if they have already taken COP 4046.

Instructional Method

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.

Prerequisites/Corequisites

Graduate standing.

Course Objectives/Student Learning Outcomes

In this course, students will be able to:

1. Articulate fundamental concepts of computer programming.
2. Solve basic problems using computational thinking.
3. Create simple applications using Python.

Course Evaluation Method

Programming assignments (five at 12% each)	60%
Quizzes (10 at 1% each)	10%
Midterm exam	15%

Final exam	15%
Extra credit assignment	5% extra credit
Total	100% + 5% extra credit

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.

Make-up tests are given only if there is solid evidence of a medical or otherwise serious emergency situation that prevented the student from participating in the exam.

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

Tony Gaddis, *Starting Out with Python*, 2017, 4th Ed., Pearson, ISBN-13:978-0134444321

Course Topical Outline

History of computing and computer programming in Python

Structuring a computer program

Basic data types and manipulating values

Input and output, including file handling

Boolean logic

Decision statements

Iterative structures

Using and creating functions

Collections of values

Strings

Using and creating modules

Introduction to object-oriented programming

Applications with common third-party libraries

Re: Proposed EECS Graduate-Level Courses (UGPC Aug 26)

From Alan Kersten <akersten@fau.edu>

Date Tue 8/26/2025 4:23 PM

To Hari Kalva <hkalva@fau.edu>

Hi Hari,

The only potential overlap with Psychology courses from this list is the Foundations of AI for Non-majors course. We have offered special topics courses in AI and Psychology and Social AI at the undergraduate and graduate levels, respectively, and will likely submit new course proposals for one or both courses in the coming year. Given that the proposed course appears to be a general treatment of AI, however, whereas any Psychology courses will be more specifically focused on the relationship between artificial intelligence and human intelligence, I don't see a problem with both types of courses co-existing in the FAU curriculum. The other courses (i.e., data engineering, foundations of programming, foundations of cloud computing, and cybersecurity) do not overlap with Psychology offerings and thus the Psychology Department has no concerns about these other course proposals.

Sincerely,
Alan

Alan Kersten
Professor and Chair
Department of Psychology
Florida Atlantic University
Boca Raton, FL 33431

From: Hari Kalva <hkalva@fau.edu>

Sent: Monday, August 25, 2025 11:54 PM

To: Alan Kersten <akersten@fau.edu>

Subject: Proposed EECS Graduate-Level Courses (UGPC Aug 26)

Hi Alan:

Attached please find the syllabi and new course forms for five proposed 5000-level courses the EECS Department is developing to support computing, AI, and data science for non-EECS majors across FAU.

At the suggestion of UGPC, I am reaching out to seek your comments on these course proposals. A brief response would be greatly appreciated to keep the UGPC process moving. Since UGPC has asked for agenda items by August 26, I apologize for the short notice and would appreciate anything you can provide on this timeline. I would also be happy to join a call to answer any questions.

The courses are:

1. CAI 5006: Foundations of AI for Non-majors
2. CAP 5796: Foundations of Data Engineering for Non-majors
3. CIS 5624: Foundations of Cloud Computing for Non-majors
4. CIS 5775: Foundations of Cybersecurity for Non-majors
5. COP 5048: Foundations of Programming for Non-majors

I appreciate your time and collegial support, and I look forward to collaborating with you on future interdisciplinary research and educational initiatives.

Best,
Hari

--

Hari Kalva, Ph.D., FNAI

Chair and Professor

Dept. of Electrical Engineering and Computer Science (eeecs.fau.edu)

Director, Multimedia Systems Lab, (mlab.fau.edu)

Florida Atlantic University

Boca Raton, FL 33431

Re: Proposed EECS Graduate-Level Courses (UGPC Aug 26)

From Sarah Milton <smilton@fau.edu>

Date Tue 8/26/2025 1:33 PM

To Hari Kalva <hkalva@fau.edu>

Good afternoon Hari - my faculty who teach courses in the field have no problem with the majority of courses, but would like clarification for CAP 5796. There's a lot of overlap in weeks 6-10 (approximately 40% of the course overlaps with our AI Applications in Biology - which is an Interdisciplinary course originally planned with having engineers take it). Having said that, CAP 5796 says "hands on calculations". If this actually means "Pen and paper" calculations, then it's fine because we don't do that. Ours is more applied with computer coding problems. So we are asking you to clarify this point with the instructor - I doubt they actually do pen and paper either.

Thanks,
Sarah

Dr. Sarah L. Milton
Professor and Chair
Department of Biological Sciences
FAU

From: Hari Kalva <hkalva@fau.edu>

Sent: Monday, August 25, 2025 11:53 PM

To: Sarah Milton <smilton@fau.edu>

Subject: Proposed EECS Graduate-Level Courses (UGPC Aug 26)

Hi Sarah:

Attached please find the syllabi and new course forms for five proposed 5000-level courses the EECS Department is developing to support computing, AI, and data science for non-EECS majors across FAU.

At the suggestion of UGPC, I am reaching out to seek your comments on these course proposals. A brief response would be greatly appreciated to keep the UGPC process moving. Since UGPC has asked for agenda items by August 26, I apologize for the short notice and would appreciate anything you can provide on this timeline. I would also be happy to join a call to answer any questions.

The courses are:

1. CAI 5006: Foundations of AI for Non-majors
2. CAP 5796: Foundations of Data Engineering for Non-majors
3. CIS 5624: Foundations of Cloud Computing for Non-majors
4. CIS 5775: Foundations of Cybersecurity for Non-majors
5. COP 5048: Foundations of Programming for Non-majors

I appreciate your time and collegial support, and I look forward to collaborating with you on future interdisciplinary research and educational initiatives.

Best,

Hari

--

Hari Kalva, Ph.D., FNAI

Chair and Professor

Dept. of Electrical Engineering and Computer Science (eeecs.fau.edu)

Director, Multimedia Systems Lab, (mlab.fau.edu)

Florida Atlantic University

Boca Raton, FL 33431



RE: Proposed EECS Graduate-Level Courses (UGPC Aug 26)

From Ryan Meldrum <meldrumr@fau.edu>

Date Tue 8/26/2025 8:09 AM

To Hari Kalva <hkalva@fau.edu>

Hi Hari,

I had the opportunities to browse the syllabi and examine our own CCJ course offerings at the graduate level. I have no objections to these courses, and some of our students likely could be interested in taking the AI and cybersecurity courses as electives once they become available.

Cheers,

Ryan



Ryan Charles Meldrum, PhD

Director and Professor

School of Criminology and Criminal Justice

College of Social Work & Criminal Justice

Florida Atlantic University

fau.edu/sw-cj

(561) 297-2461

Social Science Building, Room 208E

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"To give anything less than your best is to sacrifice the gift." - Steve Prefontaine



From: Hari Kalva <hkalva@fau.edu>

Sent: Monday, August 25, 2025 11:56 PM

To: Ryan Meldrum <meldrumr@fau.edu>

Subject: Proposed EECS Graduate-Level Courses (UGPC Aug 26)

Hi Ryan, attached please find the syllabi and new course forms for five proposed 5000-level courses the EECS Department is developing to support computing, AI, and data science for non-EECS majors across FAU.

At the suggestion of UGPC, I am reaching out to seek your comments on these course proposals. A brief response would be greatly appreciated to keep the UGPC process moving. Since UGPC has asked for agenda items by August 26, I apologize for the short notice and would appreciate anything you can provide on this timeline. I would also be happy to join a call to answer any questions.

The courses are:

1. CAI 5006: Foundations of AI for Non-majors
2. CAP 5796: Foundations of Data Engineering for Non-majors
3. CIS 5624: Foundations of Cloud Computing for Non-majors
4. CIS 5775: Foundations of Cybersecurity for Non-majors
5. COP 5048: Foundations of Programming for Non-majors

I appreciate your time and collegial support, and I look forward to collaborating with you on future interdisciplinary research and educational initiatives.

Best,
Hari

--

Hari Kalva, Ph.D., FNAI
Chair and Professor

Dept. of Electrical Engineering and Computer Science (eeecs.fau.edu)

Director, Multimedia Systems Lab, (mlab.fau.edu)

Florida Atlantic University
Boca Raton, FL 33431



Re: Fw: Getting permission from other departments for our non-majors courses

From Tamara Dinev <tdinev@fau.edu>

Date Thu 2/6/2025 4:18 PM

To Mehrdad Nojournian <mnojournian@fau.edu>; Hari Kalva <hkalva@fau.edu>

Dear Mehrdad:

ITOM has always been supportive of your curriculum development.
More often than not, your department has supported us as well.

I am all for our beneficial cooperation.
I have no objections to the proposed courses.

Best Regards:

Tamara Dinev, Ph.D.

Department Chair and Professor

Dean's Distinguished Research Fellow

Department of Information Technology and Operations Management, FL 219

College of Business,

Florida Atlantic University

Boca Raton, Florida 33431

Web: <https://business.fau.edu/faculty-research/faculty-profiles/profile/tdinev.php>

Google Scholar: <https://scholar.google.com/citations?user=YH8QZ-YAAAAJ&hl=en>

On 2/6/25 16:00, Mehrdad Nojournian wrote:

Dear Tamara,

I hope all is well with you. I'm reaching out to inquire if you would support our attached course proposals for non-majors. Please see the email below for details.

If you have any questions, please don't hesitate to contact me.

Thanks in advance,
Mehrdad

Mehrdad Nojournian, Associate Professor

Director of the Privacy, Security & Trust in Autonomy Lab

Department of Electrical Engineering & Computer Science

Florida Atlantic University

777 Glades Rd, EE 429, Boca Raton, FL 33431

Cell: (618) 305-4348

<https://faculty.eng.fau.edu/nojournian/>

From: Michael DeGiorgio <mdegiorg@fau.edu>

Sent: Wednesday, February 5, 2025 2:17 PM

To: Mehrdad Nojournian <mnojournal@fau.edu>
Cc: Waseem Asghar <wasghar@fau.edu>; Hari Kalva <hkalva@fau.edu>
Subject: Getting permission from other departments for our non-majors courses

Hi Mehrdad,

Based on the feedback from the undergraduate and graduate program committees within the department and college, we are reaching out to seek feedback and support from other departments regarding some of our proposed non-major courses. Specifically, we are looking for input on whether these departments would support our applications to create these new courses.

The EECS Department Chair (Hari Kalva) and the COECS Associate Dean for Faculty Affairs (Hanqi Zhung) are collaborating with the VA public affairs offices of Broward and Palm Beach Counties on a proposal aimed at providing experiential learning opportunities for veterans, with a focus on training in emerging technologies.

The proposed non-major courses will be part of this program and will also be available to students pursuing an Applied Track in an AI certificate. In addition to coursework, the department plans to engage students in these courses with industry partners to help translate their learning into real-world applications.

To ensure the accessibility of these courses, we are proposing to develop low-code courses at both the undergraduate (4000-level) and graduate (5000-level) levels, which we hope to cross list when offered. These courses are designed to be accessible to veterans returning for further education in emerging fields such as Data Engineering, Artificial Intelligence, and Cybersecurity. The content will cover many foundational topics from our existing curriculum, but with an emphasis on accessibility—requiring no prerequisites and tailored to students who have not previously been exposed to coding.

Could you please reach out to the following contacts to inquire if they would support our course proposals in these areas?

Data Engineering

Proposed 4000-level course (Introduction to Data Engineering for Non-majors; CAP 4790)

Proposed 5000-level course (Foundations of Data Engineering for Non-majors; CAP 5796)

Please reach out to the following Departments for these course:

Information Technology and Operations Managements (Dr. Tamara Dinev;
tdinev@fau.edu)

Artificial Intelligence

Proposed 4000-level course (Introduction to Artificial Intelligence for Non-majors; CAI 4004)

Proposed 5000-level course (Foundations of Artificial Intelligence for Non-majors; CAI 5006)

Please reach out to the following Department for these course:

Information Technology and Operations Managements (Dr. Tamara Dinev;
tdinev@fau.edu)

Best,
Mike

--

Michael DeGiorgio, Ph.D.
Associate Chair and Associate Professor
Department of Electrical Engineering and Computer Science
Florida Atlantic University
Boca Raton, FL 33431 USA
mdegiorg@fau.edu
<http://degiorgiogroup.fau.edu>



Outlook

Re: Fw: Getting permission from other departments for our non-majors courses

From Yuan Wang <YWANG@fau.edu>**Date** Wed 3/12/2025 5:25 PM**To** Hari Kalva <hkalva@fau.edu>; Mehrdad Nojournian <mnojourmian@fau.edu>**Cc** Michael DeGiorgio <mdegiorg@fau.edu>; Dukhong Kim <dkim4@fau.edu>

Hello Hari and Mehrdad,

Sorry for taking this long to get back to you. The course proposals will be fine with us if you can add registration controls not to allow Math majors (both undergraduate and graduate) to enroll in these classes, for both pairs CIS5775/CIS4771 and CAP5796/CAP4790.

Thank you very much.

Best regards,
Yuan

On 2/12/2025 11:53 AM, Hari Kalva wrote:

Hi Yuan, these courses are intended for students who don't have Engineering or Math background to take our regular cybersecurity courses. We don't expect these courses to have any significant overlap with MAD 5474. Let us know if there are any topics you think would overlap and what could be changed. We can also add registration controls to not allow Math majors to enroll in these classes.

Happy to discuss. Looking forward to you input on shaping these courses.

Best,
Hari

--

Hari Kalva, Ph.D.
eecs.fau.edu

From: Mehrdad Nojournian <mnojourmian@fau.edu>**Sent:** Tuesday, February 11, 2025 11:35 AM**To:** Yuan Wang <YWANG@fau.edu>**Cc:** Hari Kalva <hkalva@fau.edu>; Michael DeGiorgio <mdegiorg@fau.edu>**Subject:** Re: Fw: Getting permission from other departments for our non-majors courses

Hi Yuan,

I have cc-ed Hari, our chair, and Mike, our associate chair to reply.

Thanks,
Mehrdad

Mehrdad Nojournian, Associate Professor
Director of the Privacy, Security & Trust in Autonomy Lab
Department of Electrical Engineering & Computer Science
Florida Atlantic University
777 Glades Rd, EE 429, Boca Raton, FL 33431
Cell: (618) 305-4348
<https://faculty.eng.fau.edu/nojournian/>

From: Yuan Wang <YWANG@fau.edu>

Sent: Tuesday, February 11, 2025 9:44 AM

To: Mehrdad Nojournian <mnojournian@fau.edu>

Subject: Re: Fw: Getting permission from other departments for our non-majors courses

Good morning, Mehrdad,

Thank you for check with us. But our faculty have quite some concerns about the pair of cybersecurity courses. They believe that these are low-level zero-prerequisites courses providing 4000 and 5000 level credits and overlap with several of our courses such as MAD 5474.

Please let me know if further discussions are needed. Thank you.

Best regards,
Yuan

On 2/6/2025 4:02 PM, Mehrdad Nojournian wrote:

Dear Dr. Wang,

I hope all is well with you. I'm reaching out to inquire if you would support our attached course proposals for non-majors. Please see the email below for details.

If you have any questions, please don't hesitate to contact me.

Thanks in advance,
Mehrdad

Mehrdad Nojournian, Associate Professor

Director of the Privacy, Security & Trust in Autonomy Lab
Department of Electrical Engineering & Computer Science
Florida Atlantic University
777 Glades Rd, EE 429, Boca Raton, FL 33431
Cell: (618) 305-4348
<https://faculty.eng.fau.edu/nojournian/>

From: Michael DeGiorgio <mdegiorg@fau.edu>
Sent: Wednesday, February 5, 2025 2:17 PM
To: Mehrdad Nojournian <mnojournian@fau.edu>
Cc: Waseem Asghar <wasghar@fau.edu>; Hari Kalva <hkalva@fau.edu>
Subject: Getting permission from other departments for our non-majors courses

Hi Mehrdad,

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Could you please reach out to the following contacts to inquire if they would support our course proposals in these areas?

Cybersecurity

Proposed 4000-level course (Introduction to Cybersecurity for Non-majors; CIS 4771)

Proposed 5000-level course (Foundations of Cybersecurity for Non-majors; CIS 5775)

Please reach out to the following Department for these course:
Mathematics (Dr. Yuan Wang; ywang@fau.edu)

Best,
Mike

--

Michael DeGiorgio, Ph.D.
Associate Chair and Associate Professor
Department of Electrical Engineering and Computer Science
Florida Atlantic University
Boca Raton, FL 33431 USA
mdegiorge@fau.edu
<http://degiorgiogroup.fau.edu>