FLORIDA ATLANTIC UNIVERSITY

NEW COURSE PROPOSAL
Graduate Programs

UGPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner _____
Catalog _____

Department Information Technology and Operations Manag

College Business

(*To obtain a course number, contact* ***erudolph@fau.edu***)

Prefix ISM **Number** 6276	*(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)* **Lab Code**	**Type of Course** Lecture	**Course Title** Managing AI Product Development

Credits *(See Definition of a Credit Hour)*
3

Effective Date *(TERM & YEAR)*
Spring 2025

Grading *(Select One Option)*
Regular (●)
Sat/UnSat ( )

Course Description *(Syllabus must be attached; see Template and Guidelines)*
This course introduces students to the practical methodologies of managing the development cycle of AI based applications and services to enhance business success. By managing, designing and developing AI-native as well as adapting commercial applications that support low-code/no-code tools, the participants will acquire the necessary knowledge to explore opportunities for automation using AI and to acquire applied knowledge of managing the AI product development and deployment.

Prerequisites
This course has no prerequisite.

Prerequisites, Corequisites and Registration Controls are enforced for all sections of course.

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)*
Admission to an FAU graduate program.

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
Magno Queiroz / mqueiroz@fau.edu / 7-2332

List/Attach comments from departments affected by new course
EECS was contacted. No objections were raised. See attached.

Approved by	***Date***
Department Chair	9 / 15 / 2024
College Curriculum Chair Robert Pinsker	9/24/2024
College Dean Marc Rhorer	9/24/2024
UGPC Chair	
UGC Chair	
Graduate College Dean	
UFS President	
Provost	

Email this form and syllabus to UGPC@fau.edu 10 days before the UGPC meeting.

Tamara Dinev

Subject: FW: New Courses from ITOM

From: Hari Kalva <hkalva@fau.edu>
Sent: Thursday, August 22, 2024 3:19 PM
To: Tamara Dinev <tdinev@fau.edu>
Cc: Waseem Asghar <wasghar@fau.edu>; Raquel Assis <rassis@fau.edu>
Subject: RE: New Courses from ITOM

Hi Tamara, no objections from our department.

Best,
Hari

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

From: Tamara Dinev <tdinev@fau.edu>
Sent: Monday, April 15, 2024 8:16 AM
To: Hari Kalva <hkalva@fau.edu>; Mihaela Cardei <mcardei@fau.edu>
Cc: Waseem Asghar <wasghar@fau.edu>
Subject: New Courses from ITOM

Dear Dr. Kalva:

The ITOM department has the following three new courses that we are developing to include in our course offerings.
The AI courses are new, the Business Software development course is the graduate match of our undergraduate course that we have been offering since 2000, ISM 4243

We are looking for your review and feedback on these courses. Please see the attached syllabi and let us know if you have any questions.

Best Regards:
Tamara
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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
Google Scholar: https://scholar.google.com/citations?user=YH8QZ-YAAAAJ&hl=en

ISM 6276 SECTION CRN
MANAGING AI PRODUCT DEVELOPMENT

DAYS TIMES
Classroom: BLDG ROOM
3 credits

SEMESTER YEAR

Prof. XXXXX YYYYY
Office: BLDG ROOM
Office Hours: DAYS & TIMES
Telephone: 561-297-XXXX
Email: zzzzz@fau.edu

Course Description

This course introduces students to the practical methodologies of managing the development cycle of AI based applications and services to enhance business success. By managing, designing and developing AI-native as well as adapting commercial applications that support low-code/no-code tools, the participants will acquire the necessary knowledge to explore opportunities for automation using AI and to acquire applied knowledge of managing the AI product development and deployment.

Instructional Method

In-Person w/Live Remote Option

In-person class. Instructor will live stream the class for remote synchronous attendance. In-person attendance not required.

Prerequisites/Corequisites

None.

Course Objectives/Student Learning Outcomes

- **CO:01 Describe what artificial intelligence (AI) is, what drives it, and what opportunities it offers to organizations**
- **CO:02 Examine types of AI products and compare them with other software products**
- **CO:03 Assess the management of AI product development processes and challenges in various verticals**
- **CO:04 Identify various components of successful AI product development**
- **CO:05 Explain challenges of managing AI development project and go to market strategies**
- **CO:06 Examine AI products value proposition**
- **CO:07 Build performance indicators to evaluate AI products development design with low-code/no- code AI tools**
- **CO:08 Analyze Integration process of various commercial and natively developed AI tools to deliver successful business solutions**
- **CO:09 Assess cloud consumption models to support AI software development and utilization**

(CO: Course objective)

Required Texts/Materials

- The AI Product Manager' Handbook
  ISBN: 978-1804612934
  Authors: Irene Bratsis
  Publisher: Packt Publishing
  Publication Date: February 28, 2023

- No-Code Artificial Intelligence: The new way to build AI powered applications
  ISBN: 978-9355513496
  Authors: Ambuj Agrawal
  Publisher: BPB Publications
  Publication Date: March 7, 2023

- This course utilizes multiple case studies to introduce students to the effective management of AI application development processes.

Third-Party Software
During this course, you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you should not provide personal information about yourself or your classmates on a public site. Where appropriate, you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personal information. If you have any concerns about this process, please contact your instructor.

Course Evaluation Method

The graded course components and the maximum available points are the follows.

Portfolio of AI products (product development management and Presentation)	50%
Exam	10%
In-class assignments	10%
Case studies	30%
Total	**100%**

Time Commitment Per Credit Hour

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out-of-class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

Course Grading Scale

This course uses a point system for grading. The grades are completely transparent on Canvas. To be fair to all students, there will be no individual adjustment of any tests or assignment; grades are assigned based on actual performance only.

Letter Grade	Letter Grade
A	930 - 1000
A-	900 - 929
B+	870 - 899
B	830 - 869
B-	800 - 829
C+	770 - 790
C	730 - 769
C-	700 - 729
D+	670 - 699
D	630 - 669
D-	600 - 629
F	Below 600

Policy on Makeup Tests, Late Work, and Incompletes

All lesson assignments should be submitted by the specified deadline. No assignments will be regraded because of one's failure to follow instructions, including, but not limited to, not having everything required or submitting the wrong file.

Late submissions of in-class assignments will NOT be accepted, except for the work missed because of legitimate class absence, such as illness, family emergencies, military obligation,

court-imposed legal obligations, participation in religious observance, or participation in university-approved activities. University-approved reasons for absences include participating on an athletic or academic team, musical and theatrical performances, and debate activities. The students are responsible for giving the instructor notice 24 hours before 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 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.

Unless specified in the assignment description, all assignments should be completed individually. Any inclusion of other people's work (such as from classmates, previously submitted files, or answers found online), as well as AI-generated will be treated as academic integrity violation, resulting a zero (0) for that submission.

A student who is passing a course but has not completed all work due to exceptional circumstances may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but it is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete ("I") grade must be completed within a period not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing ("F") grade.

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To ensure these rights, faculty members have the prerogative to:

• Establish and implement academic standards.

• Establish and enforce reasonable behavior standards in each class.

• Recommend disciplinary action for students whose behavior may be judged as disruptive under the Student Code of Conduct University Regulation 4.007.

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.

A note on plagiarism

Plagiarism takes many forms, including but not limited to:

- Direct copying (including 3 words in a row) without using quotations.
- Failure to use citations when an idea is not yours
    - Copying material without quotation marks is always plagiarism, even if you cite the source.
    - Providing references in the reference section without using citations is still plagiarism.

As a student, you are to avoid all types of plagiarism. For example, you must cite the textbook where you paraphrase a definition or concept from it. Failure to paraphrase and/or cite correctly your sources can result in dismissal from the class and the University. Saying you worked on project together and used the same references is not an excuse. Everyone must turn in their own individual paper which follows the correct APA formatting including proper referencing. If you are unsure about the correct ways to paraphrase concepts and definitions, contact the campus academic advisor, or the Business Communications Department on the Boca Raton campus, for further assistance.

Anti-plagiarism Software

Written components of any assignment or project may be submitted to anti-plagiarism software to evaluate the originality of the work. Any students found to be submitting work that is not their own will be deemed in violation of the University's honor code discussed above.

Use of generative AI and AI-assisted technologies

Where students use generative AI and AI-assisted technologies in the writing process, these technologies should only be used to improve the readability and language of the work. Applying the technology should be done with human oversight and control, and students should carefully review and edit the result because AI can generate authoritative-sounding output that can be incorrect, incomplete, or biased. The students are ultimately responsible and accountable for the contents of the work.

Students should disclose in their manuscript the use of AI and AI-assisted technologies. Declaring the use of these technologies supports transparency and trust and facilitates compliance with the terms of use of the relevant tool or technology.

Attendance Policy Statement

Students are expected to attend all 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.

Religious Accommodation Policy Statement

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of

examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at www.fau.edu/regulations.

Any student who feels aggrieved regarding religious accommodations may present a grievance to the executive director of The Office of Civil Rights and Title IX. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

Grade Appeal Process

You may request a review of the final course grade when you believe that one of the following conditions apply:

• There was a computational or recording error in the grading.

• The grading process used non-academic criteria.

• There was a gross violation of the instructor's own grading system.

University Regulation 4.002 of the University Regulations contains information on the grade appeals process

Special Course Requirements

Required technological skills

- Basic Skills in computer use
- Access to the internet
- Basic Canvas LMS skills
- Basic Skills for Office programs (word processing and presentation programs)

Required Software

- Microsoft 365 Suite Link to download
- Reliable web browser (recommended Chrome or Firefox)
- Mobile App: Instructions on how to download the Canvas App on an iOS device (Link for iOS Instructions) or Android device (Link for Android instructions).

Internet Connection

- Recommended: Broadband (high-speed) Internet connection with a speed of 4 Mbps or higher
- To function properly, Canvas requires a high-speed Internet connection (cable modem, DSL, satellite broadband, T1, etc.). The minimum Internet connection speed to access Canvas is a consistent 1.5 Mbps (megabits per second) or higher.
- To check your Internet speed, click here.

Minimum Technical Skills Requirements

The general and course-specific technical skills a student must have to succeed in the course include but are not limited to:

1. Accessing Internet.
2. Using Canvas (including taking tests, attaching documents).
3. Using email with attachments.
4. Creating and submitting files in commonly used word processing program formats such as Microsoft Office Tools.
5. Copying and pasting functions.
6. Downloading and installing software.
7. Using presentation, graphics, and other programs.
8. Posting and commenting in an online discussion.
9. Searching the FAU library and websites.

Computer Requirement - Basic computer specifications for Canvas Link to Specifications

Operating System

- A computer that can run Mac OSX or Win 7.0 or higher.

Peripherals

- A backup option should be available to minimize the loss of work, such as an external hard drive, a USB drive, cloud storage, or your folder on the FAU servers.

Software

- Once logged in to Canvas, make sure your Internet browser is compatible.
- Other software may be required for specific learning modules. If so, the necessary links to download and install will be provided within the applicable module.

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.

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/

Student Support Services and Online Resources

- Center for Learning and Student Success (CLASS)
- Counseling and Psychological Services (CAPS)
- FAU Libraries
- Math Learning Center
- Office of Information Technology Helpdesk
- Center for Global Engagement
- Office of Undergraduate Research and Inquiry (OURI)

- Science Learning Center
- Speaking Center
- Student Accessibility Services
- Student Athlete Success Center (SASC)
- Testing and Certification
- Test Preparation
- University Academic Advising Services
- University Center for Excellence in Writing (UCEW)
- Writing Across the Curriculum (WAC)

Course Topical Outline

- Introduction to AI Landscape
- Fundamental of AI products
- Stages of AI product development
- AI Decision Systems
- AI Prediction Systems
- Conversational AI
- AI product performance
- Customization of AI products for Verticals
- Integrating AI into existing non-AI products
- Commercializing AI products
- Ethical AI
- Understanding management activities to develop an AI application using low code/no code tools.
- Understanding the building blocks of installing guardrails as part of the AI development cycle to improve efficiency and to reduce hallucination.
- Managing the development activities to deploy or build an AI application.
- Recognizing the user experience, organizational change management processes to deploy a customized or industry-specific AI solution.

AI products and tools in the participant portfolio

- Low/code and No/code custom code development using AI
- Managing complex application development and implementation
- Dynamic pricing (predict wiliness to pay and setup dynamic pricing)
- Predict stock price (time-series)

- Aligning AI product development with the organizational needs matrix

Weekly Assignments	Topics	Labs
Week I	Developing an AI Strategy	Introduction to various AI tools
Week II	Understanding AI products, their capabilities and limitations.	Introduction to various AI tools
Week III	Managing AI product development	Introduction to various AI tools
Week IV	Fundamentals of AI Decision, Prediction and Conversional, Systems	Introduction to various AI tools
Week V	Customization of AI products for the enterprise	Application of various AI tools
Week VI	Customization of AI products for Verticals Part II	Application of various AI tools
Week VII	Benchmarking AI product performance	Application of various AI tools
Week VIII	Developing KPIs to integrate AI into existing non-AI products	Application of various AI tools
Week IX	Understanding low code/no code tools for AI application development	Using various AI tools in product development
Week X	Fundamentals of assessing AI products for efficiencies, cost management and hallucination	Using various AI tools in product development
Week XI	Understanding and managing AI development life cycle and system ecosystem	Using various AI tools in product development
Week XII	Cloud computing strategies for AI applications and consumption	Using various AI tools in product development
Week XIII	Ethical AI and Challenges for the management team	User Experience (UX) with AI tools
Week XIV	Managing the developing an AI application and portfolio management part I	Portfolio management for AI
Week XV	Managing the developing an AI	Portfolio management

	application and portfolio management part II	for AI
Week XVI	Managing the developing an AI application and portfolio management part III	Deploying AI product