

 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Graduate Programs		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner _____ Catalog _____
	Department CEECS College Engineering and Computer Science		
Current Course Prefix and Number CAP 6635	Current Course Title Artificial Intelligence		
<i>Syllabus must be attached for ANY changes to current course details. See Guidelines. 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: _____ Academic Service Learning (ASL) ** Add <input type="checkbox"/> Remove <input type="checkbox"/>		Change description to: Change prerequisites/minimum grades to: Graduate standing for CEECS students, and instructor's approval for students from other major. Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade.	
Effective Term/Year for Changes: Spring 2021		Terminate course? Effective Term/Year for Termination:	
Faculty Contact/Email/Phone Hanqi Zhuang/zuang@fau.edu/ 297-3413			
Approved by Department Chair _____ Hanqi Zhuang College Curriculum Chair _____ Francisco Presuel-Moreno College Dean _____ <i>M. Cardel</i> UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____		Date _____ _____ 10/25/2020 _____ _____ _____ _____	

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

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1. Course title/number, number of credit hours	
Artificial Intelligence /CAP 6635	3 credit hours
2. Course prerequisites, corequisites, and where the course fits in the program of study	
Prerequisites: Graduate standing for CEECS students, and instructor's approval for students from other major.	
3. Course logistics	
<i>Term:</i> Class dates and times: Class location:	
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>	
5. TA contact information	
<i>TA's name</i> <i>Office address</i> <i>Office Hours</i> <i>Contact telephone number</i> <i>Email address</i>	
6. Course description	
The basic concepts, techniques, and applications of artificial intelligence: representations, search strategies, control, communication, deduction, agents, evolutionary computation and machine learning.	
7. Course objectives/student learning outcomes/program outcomes	
<i>Course objectives</i>	The goal of this class is for students to gain breadth, depth, and perspective on the foundations, latest developments, tools, applications, and implications of artificial intelligence (AI). In this course, students will also: <ol style="list-style-type: none"> 1. Understand what it is to develop AI models, when and why models are needed, the limitations of models, and how models can be used to support conclusions. 2. Compare and contrast different AI approaches, including machine learning and deep learning methods. 3. Become resourceful and capable of navigating the web of online AI resources. 4. Become more discriminating in their assessment of published results in the field of AI.

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	<ol style="list-style-type: none"> 5. Improve their philosophical understanding of both computational and human intelligence. 6. Improve their ability to work independently on creative and novel projects. 												
8. Course evaluation method													
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Book and paper summaries</td> <td style="width: 10%; text-align: center;">50%</td> <td style="width: 50%;"></td> </tr> <tr> <td>Online quizzes</td> <td style="text-align: center;">25%</td> <td></td> </tr> <tr> <td>Hands-on Assignments</td> <td style="text-align: center;">20%</td> <td></td> </tr> <tr> <td>Participation</td> <td style="text-align: center;">5%</td> <td></td> </tr> </table>	Book and paper summaries	50%		Online quizzes	25%		Hands-on Assignments	20%		Participation	5%		
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Participation	5%												
9. Course grading scale													
<p>Grading Scale: 93 and above: "A", 90-92: "A-", 87-89: "B+", 83-86: "B", 80-82 : "B-", 77-79: "C+", 73-76: "C", 70-72: "C-", 67-69: "D+", 63-66: "D", 60-62: "D-", 59 and below: "F."</p>													
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 of 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 assignments</i> will be graded with a penalty of 10% of the maximum possible grade for each day after the assignment's due date, up to a maximum of 3 days late (i.e., 30% penalty), beyond which the assignment will receive a grade o (zero).</p> <p><i>Incomplete grades</i> are given only if there is solid evidence of medical or otherwise serious emergency situation <u>and</u> the student is currently passing the class.</p>													
11. Special course requirements													
N/A													
12. Classroom etiquette policy													
Students are required to comply with all requirements specified in the student code of conduct and not in any way disrupt the class or prevent other students from benefiting from the class. Students are to speak and behave respectfully to each other and to all FAU faculty and staff.													
13. Attendance policy statement													
<p>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.</p> <p>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</p>													

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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

Books (**REQUIRED**):

1. How smart machines think
Author: Sean Gerrish; ISBN-13: 978-0262038409 (MIT Press)
2. The master algorithm
Author: Pedro Domingos; ISBN-13: 978-0465065707 (Basic Books)

18. Supplementary/recommended readings

Reference book:

S. Russell and P. Norvig, *Artificial Intelligence: A Modern Approach 4th edition*, Prentice Hall, 2020

Additional reading materials will be provided during the semester.

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

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- 1: AI: the big picture
- 2: Foundations of AI
- 3: The age of machine learning and deep learning
- 4: AI: applications
- 5: AI: implications
- 6: AI: beyond machine learning and deep learning