

 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 6777	Current Course Title Web Mining		
<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 _____ M. Cardelino 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	
Web Mining – CAP 6777	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>	
<i>Class location and time</i>	
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	
Course covers the techniques used to model, analyze, and understand the Internet and the web, especially the web graph and hypertext data.	
7. Course objectives/student learning outcomes/program outcomes	
<i>Course objectives</i>	<p>To provide certain technical skills that are important in computer science and engineering applications; to provide knowledge base for data communication, networks, and web programming. To provide knowledge on web crawling, text clustering and classification.</p> <p>The goal of this class is for students to gain hands-on experiences on information search and web mining. Course covers techniques used to collect, analyze, and understand the data from Internet and the web (including social networks). At the end of the class, students should be able to understand the whole process of collecting information from the web, and carrying out system design for search and mining the web. We will use online web documents (such as Twitter data) as the testbed and practice web mining techniques.</p>
<i>Student learning outcomes & relationship to ABET</i>	Program outcomes with respect to ABET objective: (1) an ability to apply knowledge of mathematics, science, and engineering; (2) an ability to

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<i>objectives</i>	<p>identify, formulate, and solve engineering problems; and (3) an ability to design and conduct experiments, as well as to analyze and interpret data</p> <ol style="list-style-type: none"> 1. The student will understand the concepts of Web, Internet, Data Mining, and recommender systems. 2. The student will be able to develop algorithms and tools to analyze and mine web documents. 3. The student will learn algorithms, and tools for web recommendations. 							
8. Course evaluation method								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Home Work -</td> <td style="width: 20%; text-align: center;">60%</td> <td rowspan="3" style="width: 50%; vertical-align: top;"><i>Note:</i> The minimum grade required to pass the course is C.</td> </tr> <tr> <td>Participation -</td> <td style="text-align: center;">5%</td> </tr> <tr> <td>Final Examination -</td> <td style="text-align: center;">35%</td> </tr> </table>	Home Work -	60%	<i>Note:</i> The minimum grade required to pass the course is C.	Participation -	5%	Final Examination -	35%	
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Participation -	5%							
Final Examination -	35%							
9. Course grading scale								
<p>Grading Scale: 90 and above: "A"; 85-89: "A-"; 80-84: "B+"; 75-79: "B"; 70-74: "B-"; 65-69: "C+"; 62-64: "C"; 60-61: "C-"; 55-59: "D"; 50-54: "D-"; 49 and below: "F."</p>								
10. Policy on makeup tests, late work, and incompletes								
<p><i>Makeup tests</i> are possible, and are given only if there is solid evidence of medical or otherwise family/personal emergency issues that prevent 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 acceptable only if the student is experiencing medical or any other emergency issues (with written evidence or reports). For all other late submission, the penalty is -2 point/day.</p> <p><i>Incomplete grades</i> are against the policy of the department. Unless there is solid evidence of medical or otherwise emergency situations, which can be properly justified, incomplete grades will not be given.</p>								
11. Special course requirements								
N/A								
12. Classroom etiquette policy								
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								

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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](#).

17. Required texts/reading

Introduction to Information Retrieval, Cambridge University Press, 2008. Christopher D. Manning, Prabhakar Raghavan and Hinrich Schütze

<http://nlp.stanford.edu/IR-book/>

Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data, 2nd Edition, Springer July 2011, Bing Liu.

<http://www.cs.uic.edu/~liub/WebMiningBook.html>

18. Supplementary/recommended readings

Research papers which will be distributed in the class

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

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Information Collection and Integration [Week 1, homework 1]

- Web crawling
- Information extraction and integration

Information retrieval [week 2-3, homework 2]

- Text indexing, scoring, and ranking.
- Web Search

Web Mining [week 3-5, homework 3]

- Text clustering and classification
- Online opinion/sentiment analysis

Web Recommendation [week 5-6, homework 4]

- Recommendation systems.

Final Exam: