

 FLORIDA ATLANTIC UNIVERSITY	NEW COURSE PROPOSAL Graduate Programs		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department CEECS College College of Engineering and Computer Science <i>(To obtain a course number, contact erudolph@fau.edu)</i>		
Prefix CAP Number 6640	<i>(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)</i> Lab Code	Type of Course <input type="text" value="Lecture"/>	Course Title Natural Language Processing
Credits <i>(Review Provost Memorandum)</i> 3	Grading <i>(Select One Option)</i> Regular <input checked="" type="radio"/> Sat/UnSat <input type="radio"/>	Course Description <i>(Syllabus must be attached; see Guidelines)</i> This course will provide students with both theory and applications of Natural Language Processing. It includes relevant background material in Linguistics, Mathematics, Probability, and Computer Science. Some of the topics covered in the class are Text Similarity, Part-of-Speech Tagging, Parsing, Semantics, Question Answering, Sentiment Analysis, and Text Summarization.	
Effective Date <i>(TERM & YEAR)</i> Fall 2019		Prerequisites CAP 3530 Data Structures and Algorithm Analysis	Corequisites N/A
		Registration Controls <i>(Major, College, Level)</i> Graduate Students in the College of Engineering & Computer Science	
Prerequisites, Corequisites and Registration Controls are enforced for all sections of course			
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 Speech and Language Processing (2nd edition), Dan Jurafsky and James H. Martin, Pearson Education, ISBN-13: 978-0131873216, 2009.		
Faculty Contact/Email/Phone Dingding Wang/wangd@fau.edu/(561) 297-3228	List/Attach comments from departments affected by new course N/A		

Approved by Department Chair _____ College Curriculum Chair _____ College Dean _____ UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____	Date 2/26/2019 3/11/19 3/11/2019 _____ _____ _____ _____ _____
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Email this form and syllabus to UGPC@fau.edu one week before the UGPC meeting.

**Department of Computer and Electrical Engineering and Computer Science
Florida Atlantic University
Course Syllabus**

1. Course title/number, number of credit hours	
CAP 6640 Natural Language Processing	3 credit hours
2. Course prerequisites, corequisites, and where the course fits in the program of study	
Prerequisites: COP3530 Data Structures and Algorithm Analysis	
3. Course logistics	
Term: Fall 2019 Room: FL401; Time: Wed/Fri 2:00pm-3:20pm; Final Exam: TBD	
4. Instructor contact information	
Instructor's name	Dingding Wang
Office address	Engineering East (EE-96) Bldg., Rm. 510
Office Hours	Wed/Fri 1:00pm-2:00pm
Contact telephone number	(561) 297-3228
Email address	wangd@fau.edu
5. TA contact information	
TA's name	TBD
Office address	TBD
Office Hours	TBD
Email address	TBD
6. Course description	
This course will provide students with both theory and applications of Natural Language Processing. It includes relevant background material in Linguistics, Mathematics, Probability, and Computer Science. Some of the topics covered in the class are Text Similarity, Part-of-Speech Tagging, Parsing, Semantics, Question Answering, Sentiment Analysis, and Text Summarization.	
7. Course objectives/student learning outcomes/program outcomes	
Course objectives	At the end of the class, students should be able to master latest Natural Language Processing (NLP) techniques. Students will apply these techniques on real-world web data using NLP tools.
8. Course evaluation method	
3 Assignments (computer-based, 15% each) - 45% Exam-30% Project-25% Notes: In the project, the students will (1) read literatures and survey in an NLP area or (2) introduce an NLP software toolkit. The students will present their surveys or demos in class and submit a final report by summarizing their projects at the end of the semester.	
9. Course grading scale	
Grading Scale: 90 and above: "A", 86-89: "A-", 82-85: "B+", 80-83: "B", 76-79: "B-", 72-75: "C+", 68-71: "C", 64-67: "C-", 60-63: "D+", 56-59: "D", 52-55: "D-", 51 and below: "F." Note: Calculated grades will be rounded to the nearest integer.	
10. Policy on makeup tests, late work, and incompletes	
Makeup exams 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 exams will be administered and proctored by department personnel unless there are other pre-approved arrangements Incomplete grades are against the policy of the department, unless there is solid evidence of medical or otherwise serious emergency situation incomplete grades will not be given.	

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11. Special course requirements	
None	
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. 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)—in Boca Raton, SU 133 (561-297-3880); in Davie, LA 203 (954-236-1222); or in Jupiter, SR 110 (561-799-8585)—and follow all SAS procedures.	
14. Honor code policy	
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 unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf	
15. Counseling and Psychological Services 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. Required texts/reading	
Speech and Language Processing (2nd edition) Authors: Dan Jurafsky and James H. Martin ISBN-13: 978-0131873216, 2009.	
17. Course topical outline	
DATE	TOPIC
Week 1	Introduction and NLP Tasks
Week 2	Bag of Words Model and Text Similarity Homework 1 posted.
Week 3	Semantic Similarity Analysis
Week 4	Syntax and Parsing Homework 1 due.
Week 5	Language Modeling and Word Sense Disambiguation
Week 6	Part of Speech Tagging and Information Extraction Homework 2 posted.
Week 7	Supervised Learning Methods for NLP
Week 8	Unsupervised Learning Methods for NLP Homework 2 due.
Week 9	Exam
Week 10	Question Answering Systems
Week 11	Document Summarization Homework 3 posted.

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Week 12	Sentiment Analysis
Week 13	Deep Learning for NLP Homework 3 due.
Week 14	Machine Translation, and Generation
Week 15	Student Project Presentations
Final Exam	Final project Report due.