

SUBJECT TO CHANGE		CS 445 Natural Language Processing		
Instructor	Name	Reyyan Yeniterzi		
	E-mail	reyyan.yeniterzi@sabanciuniv.edu For faster response please email to: cs445.fens@sabanciuniv.edu		
	Phone Number	0216 568 70 41		
	Office Number	FENS G011		
	Office Hours	TBA		
Time and Place	Lecture Hours	Monday 11:40-13.30 Zoom Tuesday 09:40-10:30 Zoom		
Course Materials	Mandatory	-		
	Recommended	Speech and Language Processing by Daniel Jurafsky and James Martin. Foundations of Statistical Natural Language Processing by Christopher Manning and Hinrich Schütze Natural Language Processing with Python by Steven Bird, Ewan Klein and Edward Loper		
Weekly Subjects	Week	Dates	Subject	
	1		Introduction to Natural Language Processing Turkish Language Processing	
	2		Regular Expressions and Text Processing	
	3		Statistical Properties of Text Probability Review	
	4		Language Models	
	5		Machine Learning Review and Quiz 1 (March 29)	
	6		Text Classification (Naïve Bayes and Logistic Regression)	
	7		Neural Networks Review	
	8		Word Representation and Neural Text Classification	
	9		Sequence Modeling (Hidden Markov Models and Conditional Random Field)	
	10		Spring Break	
	11		Part of Speech Tagging and Midterm Exam (May 14)	
	12		Information Extraction	
	13		Named Entity Recognition	
	14		Edit Distance and Computational Morphology and Quiz 2 (May 31)	
15		Computational Morphology		
Assessment Methods	Type	Weight	Implementation Rule	Make-Up Rule
	Midterm Exam	30	Exam will be closed books and notes. They will be physical (in class). If it is going to be online, one live and one offline (recording) camera will be used.	Only valid excuses (with a doctor's report) are accepted to qualify for an exam make-up. Make-up can be an oral exam.
	Quiz	20	There will be two in class quizzes (during Tuesday classes). It will be closed books and notes.	Only valid excuses (with a doctor's report) are accepted to qualify for one exam make-up. Make-up can be an oral exam.
	Take Home Exam – Project	50	Two or three take home exams in total. Some of them will be written and some programming. Students will solve these individually. Copying the work of others or from	Students can use up to 3 days total for all projects. Each late has 10% (10 points) penalty.

		other sources is not permitted.
	TOTAL	100%
Determining Letter Grade	<ul style="list-style-type: none"> • Midterm exam, quiz and take home exams will be counted for the last letter grade. • Letter grades will be assigned based on curve, considering the distribution of the grades in the class • Any one of the followings lead to failing the course: <ol style="list-style-type: none"> (1) overall total grade below 40 (over 100) (2) midterm exam grade below 30 (over 100) (3) project grade below 20 (over 100) (4) missing all exams (2 quizzes and the midterm) 	
Make-up Policy	<ul style="list-style-type: none"> • If you miss an exam, you need to bring a medical report. Otherwise, you won't be allowed to take the make-up. • If you miss only the midterm, a written make-up exam will be given during the final exam period. • If you miss only one quiz, you can either take half of the other quiz's score directly or take the written make-up during the final exam period. • If you miss one quiz and the midterm, you can take the written make-up exam for midterm during the finals. For the missed quiz you can either take half of the other quiz's score directly or take the oral make-up during the final exam period. • If you miss both quizzes, but not the midterm, you can take either a written and/or an oral make-up exam during the final exam period. • If you miss all exams (both quizzes and the midterm), you will fail the course. • In make-up exams (either for the midterm or quiz) you will be responsible from all topics. 	
Other	Scholastic Honesty	Students are expected to abide by the rules of scholastic honesty. Any form of scholastic dishonesty is a serious academic violation and will result in a disciplinary action. Violations of scholastic honesty include, but are not limited to cheating, plagiarizing, fabricating information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Any type of plagiarism will result a grade of -100.
	Flexibility	Circumstances may arise during the course that prevents the instructor from fulfilling each and every component of this syllabus; therefore, the syllabus is subject to change. Students will be notified prior to any changes.