

# COM 4705 Introduction to Natural Language Processing 2024 Fall

## Zhou Yu

Note: The syllabus is subject to change. Please check this page frequently for any updated information.

### Class Time

Time	Location
Mon 4:10 pm - 5:25 pm	Mudd 451
Wed 4:10 pm - 5:25 pm	Mudd 451

### Instructor Office Hours

Time	Location
Monday 9:30-11 am	Schapiro CEPSR 723

### TAs and their office hours, location:

TA	Office Hour	location
Siyan Li	Tuesdays 9:30 am - 11:30 am	Schapiro CEPSR 7th Floor Lounge
Zachary Horvitz	Tuesdays 3:00 pm - 5:00 pm	Schapiro CEPSR 724
Matthew Toles	Wednesday 11:00am - 1:00pm	Schapiro CEPSR 725 <a href="http://meet.google.com/oaj-fwdz-ryt">http://meet.google.com/oaj-fwdz-ryt</a>
Xiao Yu	Thursday 4:30 pm - 6:30 pm	Schapiro CEPSR 7th Floor Lounge ( <i>checkout CEPSR 7LE5 if I am not there</i> )

Xuanming Zhang	Friday 2:00 pm - 4:00 pm	Schapiro CEPSR 713
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## Discussion Policy

This class has a Ed Discussion section for students to ask and discuss all kinds of questions regarding lectures, homework, and exams. While TAs and Instructors will answer questions, all the students are also welcome to post their solutions to help their classmates. We strongly encourage students to respond to questions on the Ed Discussion at the end of the semester, 5 students with the most instructor-endorsed responses will receive a 3% extra credit to their final grade.

## Attendance Policy

**Attendance Form:** <https://forms.gle/vzsRBEYyXy4AxTzD7>

When attendance is being taken during a class session, an attendance code will be provided to all students. To mark your attendance:

1. Access the provided Attendance Form link.
2. Enter the given attendance code.
3. Ensure you submit the form by no later than **2:30 am** on the following day.

Submissions after the **12-hour deadline** will not be considered as present for that class.

You will receive full mark if you attend at least 80% of the courses

## Email Policy

If you have a question that is not confidential or personal, post it on the Ed Discussion forum - responses tend to be quicker and have a wider audience. To contact the teaching staff directly, we strongly encourage you to come during office hours. Please don't email individual staff members. If you have a matter to be discussed privately, please come to office hours, or make an appointment in person. For grading questions, please talk to us during office hours.

## Regrade Policy

### Regrade Requests

If you feel you deserve a better grade on an assignment or a quiz, you may submit a regrade request to the course email within two days after the grades are released. Your request should briefly summarize why you feel the original grade was unfair. Your TA will reevaluate your assignment as soon as possible and then issue a decision. If you are still not happy, you can ask for your assignment to be graded by an instructor.

## Honor Code

Since we occasionally reuse assignments from previous years, we expect students not to copy, refer to, or look at the solutions in preparing their answers. It is an honor code

violation to intentionally refer to a previous year's solutions. This applies both to the official solutions and to solutions that you or someone else may have written up in the previous year. It is also an honor code violation to find some way to look at the test set or interfere in any way with programming assignment scoring or tampering with the submitted script.

### Cheating Policy

Please see [the document](#). Please also refer to the university's code of conduct:

### Grades

Homework	51%
Midterm	17%
Final	20%
Attendance	12%
Ed Discussion (extra credit)	3%

### Homework Grading

You will be given a total of 4 days of late days for all homework throughout the semester. If all the late days are used up, work that is up to 48 hours late will still be credited, but with an extra 10% deduction for every 12 hours past the deadline. Please notice that as we have already given you some late days for any kind of exception for late homework, once the late days are used up, we will accept no exception excuse to waive the late homework penalty, which includes doctor's notice and all kinds of uploading issues at the last minute.

### Textbooks

There is no required textbook, but I will expect you to know the material listed above, drawn from the textbooks and other readings. The material in the readings will be tested on the final exam. Different people may learn better from different combinations of videos/lectures, reading the chapters, or coming to the in-class group exercises. The best-prepared students who do the best on the final exams tend to do all three.

Attendance is taken by filling a form after every lecture. Online new chapters from [Jurafsky and Martin. third edition in progress. Speech and Language Processing.](#)

### Course Schedule

Date	Lecture Name	Homework	Book	Slides

Sept 4	Introduction			<a href="#">Link</a>
Sept 9	Basic Text Processing, Edit-distance		<a href="#">Link</a>	<a href="#">Link</a> <a href="#">Link</a>
Sept 11	Language Models		<a href="#">Link</a>	<a href="#">Link</a>
Sep 16	Spelling corrections			<a href="#">Link</a> <a href="#">Link</a>
Sep 18	Large Language Models(LLMs) [ by Siyan Li]		<a href="#">Link</a>	<a href="#">Link</a> <a href="#">Link</a>
Sep 21, 11am	Tutorials on Python			
Sep 23	Basic Neural Networks,		<a href="#">Link</a>	<a href="#">Link</a>
Sep 25	skip			
Sep 28, 11am	Tutorials on Pytorch			
Sep 30	Transformers, Vector Semantics		<a href="#">Link</a> <a href="#">Link</a>	<a href="#">Link</a> <a href="#">Link</a>
Oct 2	Vector Semantics		<a href="#">Link</a>	<a href="#">Link</a>
Oct 7	POS Tagging		<a href="#">Link</a>	<a href="#">Link</a>

Oct 9 (Wed)	POS Tagging/Parsing		<a href="#">Link</a> <a href="#">Link</a>	<a href="#">Link</a>
Oct 14 (Mon)	Advanced Semantics			<a href="#">Link</a>
Oct 16 (Wed)	Prompting + Finetuning + RLHF			<a href="#">link</a>
Oct 21 (Mon)	Machine Translation		<a href="#">link</a>	<a href="#">Link</a>
Oct 23 (Wed)	Sentiment Analysis		<a href="#">Link</a>	<a href="#">Link</a>
Oct 28 (Mon)	Mid-term			
Oct 30 (Wed)	Information Extraction		<a href="#">Link</a>	<a href="#">Link</a>
Nov 4 (Mon)	Academic Holiday			
Nov 6 (Wed)	Language Generation [Zachary Horvitz]			<a href="#">Link</a>
Nov 11 (Mon)	Summarization			<a href="#">Link</a>
Nov 13 (Wed)	Bias and Ethics [Matthew Toles]			<a href="#">link</a>
Nov 18 (Mon)	Question Answering [Yu Li]		<a href="#">Link</a>	<a href="#">Link</a>
Nov 20 (Wed)	Dialogs [Max Chen]		<a href="#">Link</a>	<a href="#">Link</a>
Nov 25 (Mon)	(V)LM Agents [Xiao Yu]			<a href="#">Link</a>

Nov 27 (Wed)	School holiday			
Dec 2 (Mon)	Human-centered NLP [Xuanming Zhang]			<a href="#">Link</a>
Dec 4 (Wed)	RAG + Fact Checking			<a href="#">link</a>
Dec 9 (Mon)	Final Exam			