

Tues/Thurs, 5:00-6:20pm, DP D207B/D212

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Office hours: Generally, T/W/Th 4-4:45pm, or by appointment

(email me: alexis.palmer@unt.edu)

Course Description and goals:

This course is an introduction to computational linguistics, at the graduate level, and from a (relatively) linguistically-oriented perspective. Goals:

- Investigate the range of linguistic phenomena that have been addressed within CL
- Develop skills for reading and presenting papers in computational linguistics
- Develop understanding of how language can be analyzed computationally and why it is challenging
- Become familiar with core methods in computational linguistics, including both rule-based and statistical methods, as well as very basic concepts of machine learning
- Learn basic Python programming and core natural language processing (NLP) tools using the Natural Language Toolkit (NLTK)

Textbooks:

1. No requirement to purchase texts. Most readings will be posted on Canvas.
2. Online texts:
 - a. Think Python (TP), 2nd edition (for Python 3), Allan B. Downey:
<http://greenteapress.com/thinkpython2/html/thinkpython2003.html>
 - b. Natural Language Processing with Python (NLTK), Steven Bird, Ewan Klein & Edward Loper:
A complete new edition of this text is available for free online at <http://www.nltk.org/book>
The online version is up-to-date and works with the latest edition of the NLTK. A printed version of the text is only available for the First Edition.
3. Suggested texts for those interested in learning more: *Speech and Language Processing* – Daniel Jurafsky & James H. Martin. Second edition, 2009. Pearson Prentice Hall. This is one of *the* foundational texts for computational linguistics. We will read only selected chapters from this text, and most of those can be found online. HOWEVER, if you anticipate a future in computational linguistics, you will most certainly want to own this book.
4. Suggested (optional) text for those interested in more detailed instruction in Python: Python Crash Course (PCC), Eric Matthes, No Starch Press: <https://nostarch.com/pythoncrashcourse>

1. **Canvas:** All assignments will be posted on Canvas, with all the details you need to complete them. I will also post slides from each class, and readings. **Unless otherwise specified, please submit assignments via Canvas.**

2. **Slack:** For communication/questions/discussion, we'll use the following Slack channel:

<https://ling5410-spring2019.slack.com/messages/>

Course credit requirements and grading

1. 19% - Reading (including submitted reading questions), discussion, exercises, participation, attendance
 - a. 7% weekly reading & reading questions (submitted by noon, Tuesdays)
 - b. 7% weekly exercises (submitted by midnight, Fridays)
 - c. 5% attendance & participation
2. 21% - Larger homework assignments (3, due Feb 11, March 8, April 15, by 8am)
3. 15% - Paper presentation and discussion session

4. 20% - Midterm exam (take-home, assigned March 7, due by March 22 at midnight)
5. 25% - Team project (due no later than finals week, May 9 at 8am)

Attendance & Participation: Attendance is EXPECTED, but I understand that things sometimes come up. If a situation develops such that you will need to miss multiple classes, please make an appointment to discuss this with me in person.

Exercises: Learning to program is all about practice, practice, practice! The point of the weekly exercises is to give you plenty of opportunities to practice, and for you to get thoroughly comfortable with the process of turning an idea into a bit of Python. Please submit these, even if you know you got things wrong, even if you couldn't finish everything! Exercises are evaluated on a pass/fail basis. Also, be sure to copy in results from your interactive sessions, so that I can see what may or may not be going wrong.

Late assignments: I will accept late assignments up to the end of the day on the Sunday following the assignment's due date. However, you will lose 10% of the overall available points for the assignment for each day that the work is late. It pays off to submit something, even if you're late!

Linguistics Colloquia and COI Discovery Series Talks: The Department of Linguistics and the College of Information each offer a series of talks from experts in the field. This semester we will have a particularly high density of talks from computational linguists. Please plan to attend these if at all possible – I'll be sure to announce the talks, and they will also appear on the course schedule.

Class behavior (University policy): Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at www.unt.edu/csrr

Academic Integrity Please make sure that all the work you submit in this course is **your own!!!** It is your responsibility to know the definitions and consequences of plagiarism, cheating etc. as outlined in the Code of Student Conduct and Discipline, available in the Undergraduate Catalog and online at [http://catalog.unt.edu/content.php?catoid=5&navoid=244#Student Standards of Academic Integrity](http://catalog.unt.edu/content.php?catoid=5&navoid=244#Student_Standards_of_Academic_Integrity)

Disability Accommodation Statement

"The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at <http://www.unt.edu/oda>. You may also contact them by phone at 940.565.4323."

Students with any special needs or disabilities (including learning disabilities) should inform me of their needs as soon as possible so that proper accommodations can be made.

SEXUAL DISCRIMINATION, HARASSMENT, & ASSAULT

UNT is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these acts of aggression, please know that you are not alone. The federal Title IX law makes it clear that violence and harassment based on sex and gender are Civil Rights offenses. UNT has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

UNT's Dean of Students' website offers a range of on-campus and off-campus resources to help support survivors, depending on their unique needs: http://deanofstudents.unt.edu/resources_0. Renee LeClaire McNamara is UNT's Student Advocate and she can be reached through e-mail at SurvivorAdvocate@unt.edu or by calling the Dean of Students' office at 940-565-2648. You are not alone. We are here to help.