UNSW Course Outline

LING5003 Language Technology - 2024

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General Course Information

Course Code : LING5003
Year : 2024
Term : Term 3
Teaching Period : T3
Is a multi-term course? : No
Faculty : Faculty of Arts, Design and Architecture
Academic Unit : School of Humanities and Languages
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

Language technology is an interdisciplinary field concerned with the scientific study of how we employ computers to analyse, produce, and use human language in the form of text and speech. In this course, you will examine the fundamental topics and applications of language technology

which will enable you to understand and situate its contemporary uses across the Internet and in cutting-edge research and development contexts, including machine translation and artificial intelligence. You will also learn to use a range of language technology tools with immediate applications that will enable you to conduct your own investigations into a growing body of diverse language data available on the Internet, including new and social media. As this is an introductory and interdisciplinary course, a background in linguistics or computer science is not required.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Construct a model of computational approaches to human language processing
CLO2 : Evaluate the application of computational approaches to the analysis of human language data
CLO3 : Appraise contemporary language technology tools used in research and real-world applications

Course Learning Outcomes	Assessment Item
CLO1 : Construct a model of computational approaches to human language processing	• Quiz • Essay • Technical Report
CLO2 : Evaluate the application of computational approaches to the analysis of human language data	• Essay • Technical Report
CLO3 : Appraise contemporary language technology tools used in research and real-world applications	• Technical Report

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams | Zoom | Echo 360

Learning and Teaching in this course

This course is taught as a weekly face-to-face seminar in which you will engage with practical knowledge, cutting-edge research, industry case studies and interactive practical exercises. Supplementary online materials will enhance your learning and complement face-to-face activities.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Quiz	20%	Start Date: 01/10/2024 09:00 AM Due Date: 01/10/2024 05:00 PM
Essay	40%	Due Date: 10/11/2024 05:00 PM
Technical Report	40%	Start Date: ongoing TBA Due Date: 19/11/2024 05:00 PM

Assessment Details

Quiz

Assessment Overview

Individual multiple-choice quiz containing 40 short questions from the course content.

Individual written feedback is provided on each question. Group feedback will be provided and discussed in class.

Course Learning Outcomes

- CLO1 : Construct a model of computational approaches to human language processing

Detailed Assessment Description

Individual multiple-choice quiz containing 40 short questions from the course content.

Individual written feedback is provided on each question. Group feedback will be provided and discussed in class.

Assessment Length

multiple-choice quiz containing 40 short questions

Assessment information

Refer to Moodle for submission information

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see here.

Essay

Assessment Overview

A 2,000-word essay on one of the topics covered in the course.

Marking via a rubric in Turnitin. Individual written feedback will be provided in Turnitin. Group feedback will be provided and discussed in class.

Course Learning Outcomes

- CLO1 : Construct a model of computational approaches to human language processing
- CLO2 : Evaluate the application of computational approaches to the analysis of human language data

Detailed Assessment Description

A 2,000-word essay on one of the topics covered in the course.

Marking via a rubric in Turnitin. Individual written feedback will be provided in Turnitin. Group feedback will be provided and discussed in class.

Assessment Length

2,000 words

Assessment information

Refer to Moodle for submission information

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

Generative AI Permission Level

Simple Editing Assistance

In completing this assessment, you are permitted to use standard editing and referencing functions in the software you use to complete your assessment. These functions are described below. You must not use any functions that generate or paraphrase passages of text or other media, whether based on your own work or not.
If your Convenor has concerns that your submission contains passages of AI-generated text or media, you may be asked to account for your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct &

Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

Technical Report

Assessment Overview

A technical report on the analysis?of a dataset of human language. This report takes the form of a scientific poster (20%) and a 5-minute poster presentation (20%).

Marking via a rubric in Turnitin. Individual written feedback will be provided in Turnitin. Group feedback will be provided and discussed in class.

Course Learning Outcomes

- CLO1 : Construct a model of computational approaches to human language processing
- CLO2 : Evaluate the application of computational approaches to the analysis of human language data
- CLO3 : Appraise contemporary language technology tools used in research and real-world applications

Detailed Assessment Description

There are two interelated parts to the Technical Report. They make up 40% but they are separate submissions.

1. A technical report on the analysis of a dataset of human language in the form of a scientific poster (20%).

2. Poster presentation of 5 minutes duration (20%) presented by roster in class.

Marking via a rubric in Turnitin. Individual written feedback will be provided in Turnitin. This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Assessment information

Marking via a rubric in Turnitin.

Refer to Moodle for detailed submission information of the oral presentation of the Technical Report, and submission details for the Technical Report poster.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Generative AI Permission Level

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show your Course Authority if there is any uncertainty about the originality of your work.
If your Convenor has concerns that your answer contains passages of AI-generated text or media that have not been sufficiently modified you may be asked to explain your work, but we recognise that you are permitted to use AI generated text and media as a starting point and some traces may remain. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

General Assessment Information

Details to be discussed in class

Detailed information for each assessment will be provided on the course Moodle page

Grading Basis

Standard

Requirements to pass course

at least 50 percent average

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 9 September - 15 September	Seminar	Overview of Language Technology
Week 2 : 16 September - 22 September	Seminar	Basics of Natural Language Processing Practice NLP via NLTK in Python 3
Week 3 : 23 September - 29 September	Seminar	Basics of Machine Translation Practice Wordfast Pro 6
Week 4 : 30 September - 6 October	Assessment	Quiz on 1/10/2024
Week 5 : 7 October - 13 October	Reading	Reading week - no classes
Week 6 : 14 October - 20 October	Seminar	Basics of Corpus Linguistics BNC, COCA and Sketch Engine
Week 7 : 21 October - 27 October	Seminar	Audiovisual Translation (subtitling) Subtitling in Aegisub
Week 8 : 28 October - 3 November	Reading	No class this week
Week 9 : 4 November - 10 November	Seminar	Eye-tracking Technology Webcam-based Eye-tracker – RealEye
	Assessment	Essay worth 40% due 10/11/24 by 5 PM
Week 10 : 11 November - 17 November	Seminar	Wrap-up and Poster presentations.
	Assessment	Part 1 Technical Report, Presentation 20%

Attendance Requirements

Students must attend all seminars.

Real time attendance is mandatory because the seminar is designed to achieve the specific course learning outcomes (LO 1,2,3). Students who record non-attendance can receive a fail for the course. Live seminars will be recorded for future reference by students. Where a student is unable to attend required activities, they need to inform their Course Authority who may approve the non-attendance and must document the outcome. Alternative arrangements will be provided for students who are unable to meet the attendance or participation requirements due to unavoidable conflicts.

Additional Considerations:

- Align with the course learning outcomes;
- Result in a recorded artefact (an artefact for participation may include a post, or response, to an online discussion forum, poll or quiz, when an artefact for mandatory attendance may include a record of attendance) and have processes in place for recording the student artefact;
- Where relevant, include evidence that the attendance or participation is required to meet a statutory or professional body requirement; and
- Be comparable where the activity is delivered in different modes.

Course Resources

Prescribed Resources

These will be provided on Moodle

Recommended Resources

These will be provided on Moodle

Course Evaluation and Development

Student feedback is gathered formally through myExperience and informally through shared ideas in discussion. This is a relatively new course in answer to student demand. Feedback will be welcomed.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Clair Hill		online		TBA	No	No
Lecturer	Qihang Jiang		online		TBA	No	Yes

Other Useful Information

Academic Information

Due to evolving advice by NSW Health, students must check for updated information regarding online learning for all Arts, Design and Architecture courses this term (via Moodle or course information provided).

Please see: https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support/protocols-guidelines for essential student information relating to:

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Dean's List;
- review of results;
- credit transfer;
- cross-institutional study and exchange;
- examination information;
- enrolment information;

- Special Consideration in the event of illness or misadventure;
- student equity and disability;

And other essential academic information.

Academic Honesty and Plagarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

- Copying: Using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This includes copying materials, ideas or concepts from a book, article, report or other written document, presentation, composition, artwork, design, drawing, circuitry, computer program or software, website, internet, other electronic resource, or another person's assignment without appropriate acknowledgement.
- Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original information, structure and/or progression of ideas of the original without acknowledgement. This also applies in presentations where someone paraphrases another’s ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.
- Collusion: Working with others but passing off the work as a person’s individual work. Collusion also includes providing your work to another student for the purpose of them plagiarising, paying another person to perform an academic task, stealing or acquiring another person’s academic work and copying it, offering to complete another person’s work or seeking payment for completing academic work.
- Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.
- Duplication ("self-plagiarism"): Submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

The UNSW Academic Skills support offers resources and individual consultations. Students are also reminded that careful time management is an important part of study. One of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items. UNSW Library has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW, but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time
- understand your rights and responsibilities as a student at UNSW
- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

Use of AI for assessments

As AI applications continue to develop, and technology rapidly progresses around us, we remain committed to our values around academic integrity at UNSW. Where the use of AI tools, such as ChatGPT, has been permitted by your course convener, they must be properly credited and your submissions must be substantially your own work.

In cases where the use of AI has been prohibited, please respect this and be aware that where unauthorised use is detected, penalties will apply.

Use of AI for assessments | UNSW Current Students

Submission of Assessment Tasks

Turnitin Submission

If you encounter a problem when attempting to submit your assignment through Turnitin, please telephone External Support on 9385 3331 or email them on externalteltsupport@unsw.edu.au

Support hours are 8:00am – 10:00pm on weekdays and 9:00am – 5:00pm on weekends (365 days a year). If you are unable to submit your assignment due to a fault with Turnitin, you may apply for an extension, but you must retain your ticket number from External Support (along with any other relevant documents) to include as evidence to support your extension application. If you email External Support, you will automatically receive a ticket number, but if you telephone, you will need to specifically ask for one. Turnitin also provides updates on their system status on Twitter.

Generally, assessment tasks must be submitted electronically via either Turnitin or a Moodle assignment. In instances where this is not possible, alternative submission details will be stated on your course's Moodle site. For information on how to submit assignments online via Moodle: https://student.unsw.edu.au/how-submit-assignment-moodle

Late Submission Penalty

UNSW has a standard late submission penalty of:

- 5% per calendar day,
- for all assessments where a penalty applies,
- capped at five calendar days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Students are expected to manage their time to meet deadlines and to request Special Consideration as early as possible before the deadline. Support with Time Management is available here.

School Contact Information

School of Humanities & Languages

Email: hal@unsw.edu.au

Location: School Office, Morven Brown Building, Level 2, Room 258

Opening Hours: Monday - Friday, 9am - 5pm