

ET310-15 Artificial Intelligence and Applied Linguistics

25/26

Department

Applied Linguistics

Level

Undergraduate Level 3

Module leader

Christopher Strelluf

Credit value

15

Module duration

10 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

Large-language model (LLM) artificial intelligence (AI) systems are evolving and expanding rapidly and dramatically--in terms of technological capabilities, practical applications, and roles in people's lives. Applied linguists are uniquely positioned to shape LLM AI and to influence the ways that people act and interact with, through, about, and because of LLM AI. Indeed, applied linguists arguably have a responsibility to engage with LLM AI, as scholars who can offer insights into language structure, communicative interaction, knowledge and truth, teaching and learning, ethicality, and social justice. This module will probe the intersections of applied linguistics and AI to prepare students to understand LLM AI, and to engage, challenge, critique, improve, and apply these systems as scholars and professionals. Following a symposium approach, module content will evolve according to research and teaching activities within Applied Linguistics at Warwick, giving students exposure to active innovations in LLM AI and applied linguistics.

Module aims

This module is guided by two questions: "What does applied linguistics bring to AI?" and "What does AI bring to applied linguistics?" It will present answers to these questions from the perspectives of Applied Linguistics academic staff, and engage students to answer these

questions in the context of their intellectual interests, ethical commitments, and professional objectives.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Week 1: Cyborgs and Centaurs: Models for integrating human and artificial intelligences in tasks;

Week 2: Words pointing to other Words: How LLMs work (and why they sometimes don't);

Week 3: What does it mean when AI systems are labelled as "biased"?

Week 4: Opening the "black box": How we interrogate unknowable decision-making?;

Week 5: AI as a conversational partner: What Discourse Analysis reveals;

Week 6: Reading Week--optional session on assessment

Week 7: Discourses of artificial intelligence: How do humans talk (and think) about AI;

Week 8: Reconceptualizing authorship in the age of hybrid human-AI writing;

Week 9: AI and intercultural communication;

Week 10: Impact of generative AI on language education: disruptive or transformative?

Learning outcomes

By the end of the module, students should be able to:

- Evaluate uses of AI technologies in a range of contexts.
- Construct an informationally rigorous and intellectually valid artefact using AI.
- Critique popular and scientific discourses about AI.
- Reflect on strategies for using AI.
- Analyse AI outputs according to concepts from linguistic and communication sciences.
- Explain applied linguistic perspectives on AI to academic audiences.
- Create strategies for using AI in applied and professional settings.
- Explain applied linguistic perspectives on AI to non-academic audiences.
- Assess the quality of information generated by AI.
- Defend decisions to draw on human intelligence versus AI

Indicative reading list

[Reading lists can be found in Talis](#)

Research element

Students will design and conduct an original research project on a module topic, using AI as a collaborator. Additionally, students will research real-world contexts for using AI (e.g., LLM AI in an industry where they wish to work) in order to develop guidance on using AI in applied and professional contexts. (In some cases this research will be comprised of a literature review, but in other cases students will likely consult industry directly.)

Interdisciplinary

Module content--which explores LLM AI through applied linguistics--is inherently interdisciplinary. Teaching and learning on AI and LLMs tends to be disciplinarily homed in computer sciences, and approaches we are labelling "applied linguistics" will encompass diverse traditions from linguistics, psychology, education, cultural studies, communication sciences, and information theory, among others. Some topics in some iterations of the module may be led by colleagues from other departments at Warwick or Warwick's international partner institutions, or by experts from industry.

International

Module topics will engage with issues related to AI in international, intercultural, and translingual contexts. Content will be drawn from ongoing international research by academic staff. The module may also draw on complementary expertise from Warwick's international networks, including EUTOPIA and the Warwick-Monash alliance.

Subject specific skills

Students will draw on subject-specific knowledge to...

1. Analyse LLM structure and outputs according to concepts from phonetics, phonology, morphology, syntax, semantics, and pragmatics.
2. Analyse LLM-human interactions according to concepts from discourse analysis and conversation analysis.
3. Analyse human experience of LLM AI according to concepts from philosophy of language, sociolinguistics, social psychology, psycholinguistics, and cognitive linguistics.
4. Analyse social meanings of AI according to concepts from cultural psychology, discourse analysis, and sociolinguistics.
5. Analyse issues related to AI in applied contexts such as educational linguistics and intercultural communication.

Transferable skills

Students will learn to...

1. Assess the value of AI and contributions from AI in applied and professional contexts.
 2. Create knowledge and artefacts more effectively and efficiently by leveraging AI.
 3. Critique roles of AI in society and social understandings of AI.
 4. Design strategies and policies for using AI in applied and professional contexts.
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Study

Study time

Type	Required	Optional
Lectures	9 sessions of 2 hours (12%)	4 sessions of 2 hours
Seminars	9 sessions of 1 hour (6%)	
Private study	54 hours (36%)	
Assessment	69 hours (46%)	
Total	150 hours	

Private study description

Assigned readings

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A

Assessment component	Weighting	Study time	Eligible for self-certification
Human-AI collaborative research project Collaborate with AI to conduct and create an original applied linguistics research project that advances knowledge on a topic introduced in the module.	30%	24 hours	Yes (extension)

Reassessment component is the same

Assessment component	Weighting	Study time	Eligible for self-certification
Framework for AI in an applied setting Produce guidelines for using AI in a professional (or other applied) context which are actionable, persuasive, and informed by applied linguistic knowledge.	30%	20 hours	Yes (extension)

	Weighting	Study time	Eligible for self-certification
Reassessment component is the same			
Assessment component			
Critical reflective analysis of Human-AI collaboration	40%	25 hours	Yes (extension)
From an applied linguistics perspective, document, describe, analyse, and assess strategies for collaborating with AI to write the "Human-AI collaborative research project"			

Reassessment component is the same

Feedback on assessment

Qualitative evaluation on standard Applied Linguistics pro forma and according to Applied Linguistics standard assessment rubric, with feedback returned via Tabula

Availability

Pre-requisites

To take this module, you must have passed:

- All of
 - [ET118-30 Linguistics: Understanding Language](#)

Courses

This module is Optional for:

- Year 3 of UETA-X3Q5 Undergraduate Language, Culture and Communication
- Year 4 of UETA-X3Q8 Undergraduate Language, Culture and Communication (with Intercalated Year)
- Year 4 of UETA-Q1A7 Undergraduate Linguistics with Chinese (with Intercalated Year)
- Year 4 of UETA-Q1A1 Undergraduate Linguistics with French (with Intercalated Year)
- Year 4 of UETA-Q1A8 Undergraduate Linguistics with Japanese (with Intercalated Year)
- Year 3 of UETA-Q1R4 Undergraduate Linguistics with Spanish
- Year 4 of UETA-Q1A4 Undergraduate Linguistics with Spanish (with Intercalated Year)
- Year 4 of UETA-C805 Undergraduate Psychology with Linguistics (with Intercalated Year)

- Year 3 of UETA-Q310 in English Language and Linguistics
- Year 4 of UETA-Q311 in English Language and Linguistics (with Intercalated year)

This module is Option list D for:

- Year 3 of UPSA-C802 Undergraduate Psychology with Linguistics