

The Hong Kong University of Science and Technology
UG Course Syllabus

Science Communication in English (Life Science)

LANG 3024

3 credits

Pre-requisites: LANG 2010

Co-requisites: N/A

Name of Course Leaders: Eunice Tang

Email of Course Leaders: iceunicetang@ust.hk

Office Hours of Course Leaders: Available by appointment only. Students should contact their section instructor directly with any questions.

Course Description

The course focuses on developing students' ability to communicate life science knowledge to the general public through effective writing and speaking skills. In writing, students learn the specific skills to produce genres of both expository and persuasive nature and reflect on how to argue for their own stance of a controversial issue in an accessible manner without losing the scientific complexity. In speaking, students learn how to communicate life science notions and implications to nonexpert audiences using oral presentations with appropriate rhetorical and stylistic devices. For BCB, BISC and BIOT students only.

Course content:

Cycle 1 Science Communication and story-telling

- Discuss the importance of science communication
- Communicate science to the public
- Discuss the role of storytelling in science communication
- Contextualize and create a twist in your story
- Identify features of authentic, interactive pop science podcasts
- Anchor texts in in-text citations

Cycle 2 Communicating controversy in Life Science

- Describe controversies in life science
- Analyze a controversy
- Discuss a controversial life science topic through persuasion
- Explore the structure and tone of op-eds
- Analyze the choice of words in op-eds
- Identify features of pop science talks on life science topics
- Plan a pop science talk
- Deal with questions in the Q&A session

Methods of instruction: interactive tutorials support active learning through group discussion, collaborative activities, peer learning and feedback and self-access online materials for learning enrichment.

Intended Learning Outcomes (ILOs)

By the end of this course, students should be able to:

1. formulate a specific message related to Life Science to the public;
2. communicate effectively scientific concepts and knowledge in writing and oral presentations to lay audiences individually and in a team;
3. recognize the need to communicate courteously and appropriately in professional contexts;
4. critique points made in popular science articles in the field of life science;
5. demonstrate knowledge of the features of various spoken and written genres in science communication;
6. engage in lifelong language learning through intelligent selection and adaptation of various learning resources.

Assessment and Grading

This course will be assessed using criterion-referencing and grades will not be assigned using a curve. Detailed rubrics for each assignment are provided below, outlining the criteria used for evaluation.

Assessments:

Assessment Task	Contribution to Overall Course grade (%)	Due date
Inspiring interest: an interactive podcast	20%	Approx. week 5*
Pop science talk on a Life Science controversy	35%	Approx. week 8*
Op-ed article on a Life Science controversy	35%	Approx. week 13*
Checkpoint tasks: in-class and out-of-class speaking and writing tasks	10%	spread through course

* Specific due dates are posted on Canvas. Assessment marks for individual assessed tasks will be released within two weeks of the due date.

Mapping of Course ILOs to Assessment Tasks

Assessed Task	Mapped ILOs	Explanation
Inspiring interest: an interactive podcast	ILO1, ILO2, ILO3, ILO4	This task assesses students' ability to formulate a specific scientific message in an interactive setting (ILO2) to a general public audience (ILO1) through appropriate spoken language for a professional context (ILO3) with reference to and critique on points made in popular science articles (ILO4).
Pop science talk on a Life Science controversy	ILO1, ILO2, ILO3, ILO4, ILO5	This task assesses students' ability to present clearly a clear stance towards a controversial life science issue with professional knowledge (ILO1, ILO2) which is accessible to science enthusiast in a pop science presentation format (ILO5) using appropriate evidence for justification with consideration of the opponents (ILO4) with verbal and non-verbal devices that are

		engaging to the target audience (ILO3).
Op-ed article on a Life Science controversy	ILO1, ILO2, ILO3, ILO4, ILO5	This task assesses students' ability to present clearly a controversial life science issue from multiple perspectives (ILO1, ILO4) to demonstrate features of the genre of op-ed (ILO5) and the necessary persuasive devices (ILO3) that are communicated coherently (ILO2).
Checkpoint tasks: in-class and out-of-class speaking and writing tasks	ILO2, ILO6	This task assesses students' completion of a series of tasks which practice reflection, active learning from feedback, peer learning and self-access materials that encourage continuous learning from a range of resources (ILO6).

Grading Rubrics

Detailed rubrics for each assignment are provided on Canvas. These rubrics clearly outline the criteria used for evaluation. Students can refer to these rubrics to understand how their work will be assessed.

Final Grade Descriptors:

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	Content: Effective presentation of arguments and perspectives with strongly justifications through excellent use of references drawn from a range of well-selected sources. Communication: Excellent use of voice quality (e.g pause, intonation, pitch and emotions) to captivate the audience with skilful interaction.
B	Good Performance	Content: Clear and well-supported arguments and perspectives with good use of references. Communication: Uses voice quality (e.g pause, intonation, pitch and emotions) well and demonstrates attempts to engage the audience.
C	Satisfactory Performance	Content: Relevant content that supports the argument but might lack sufficient support at times. Communication: Demonstrates some successful engagement of the audience.
D	Marginal Pass	Content: Arguments and perspectives might lack clarity or justification. Communication: Demonstrates some effort to engage the audience but not always successful.
F	Fail	Content: Does not synthesize, develop or organize ideas sufficiently. Ideas are very superficial, repetitive, irrelevant, inadequate, and/or lacking. Communication: Demonstrates little to no audience engagement.

Course AI Policy

We encourage students to make use of all the tools available that can help them to communicate more effectively in English. We also expect students to uphold the highest standards of academic integrity. There is no penalty for using or not using GenAI. However, GenAI and other tools cannot be used as a substitute for a student's own work. Students are expected to write their own assessed assignments and to prepare their presentations themselves.

GenAI tools can be very useful for:

- Brainstorming ideas and suggesting sources BUT the information provided may not be accurate or relevant to your assignment.
- Giving suggestions about improving the organization of your writing BUT GenAI tends to suggest very formulaic patterns of writing which may not fit your requirements.
- Giving suggestions about improving your language BUT GenAI may make suggestions for language changes which are not appropriate for the intended context and audience.
- Suggesting simple ways of expressing complex discipline-specific concepts BUT these explanations may be unfamiliar to your audience.
- Providing summaries of long texts BUT important information may be omitted, particularly if the original text is not well-written.

In short, GenAI provides opportunities to enhance your use of English and contains pitfalls which you need to be aware of.

Communication and Feedback

Assessment marks for individual assessed tasks will be communicated via Canvas within 10 working days after submission. Feedback on assignments will include strengths and areas for improvement where relevant. Students who have further questions about the feedback including marks should consult the instructor within five working days after the feedback is received.

Resubmission Policy

Resubmissions are not accepted, except in exceptional circumstances.

Required Texts and Materials

Course materials and additional resources are provided via Canvas.

Academic Integrity

Students are expected to adhere to the university's academic integrity policy. Students are expected to uphold HKUST's Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to [Academic Integrity | HKUST – Academic Registry](#) for the University's definition of plagiarism and ways to avoid cheating and plagiarism.

