

LANG3021 Course Description

Key Skills and Intended Learning Outcomes (ILOs)

LANG 3021 – Science Communication in English (Mathematics) – is a three-credit course offered to third-year students in Mathematics. Over one semester, students will attend three hours of class and will be expected to complete up to three hours of out-of-class work per week. The course focuses on two overarching skillsets / themes:

1. Science communication and story-telling

Students will understand the importance of science communication and the role of story-telling therein, develop and apply appropriate strategies to make their own communication of science (at professional levels) interesting as well as accessible to lay audience. Students develop such skills and strategies by analysing popular science articles and presentations that target the general public, and by practising and integrating feedback in and outside of classroom.

2. Communicating controversy in mathematics

Students will explore public attitudes to controversies in mathematics and how such controversies are presented in public speaking and professional writing. Students will develop the skills to critically read and write about – as well as present – scientific controversies to lay audiences in an interesting and engaging way, by applying the skillset they pick up from Theme 1.

Pedagogy

The course adopts a genre-based approach to teaching communicative language, using genres specific to conveying mathematical ideas to the public. To help students develop appropriate language and/or genre knowledge, the course provides flipped learning sessions for students to plan, explore, and practise communication frequently. The course also uses learning portfolio to encourage students to reflect on their learning of communication for personal interest and/or professional development.

Assessment

In conjunction with task-based assessment, LANG3021 uses learning portfolio to scaffold learning and to collect evidence such as preparatory work, models and practices of communication, learning resources, feedback and reflection. The ultimate objective is to help students monitor their learning, identify strengths and weaknesses, and to seek improvement as they become more independent and resourceful learners.