

Course Syllabus | WISE Frontiers of Physics and Mathematics Graduate Program

Course Title

Scientific Writing, Publication, and Communication

Instructors

Kate Harris, Ph.D., Senior URA, School of Science

Mark Vagins, Ph.D., Professor, Kavli IPMU

Guest Speakers

Nicola Burghall, Project Senior Specialist, Public Relations Group

Motoko Kakubayashi, Press Officer, Kavli IPMU

Ravindra Palavalli Nettimi, Ph.D., Project Specialist, School of Science

Overview and Objectives

Communication with the scientific community and the public in English is essential for a successful scientific career, especially as research continues to become more global and team oriented. In this course, students will learn the major forms of scientific communication used by professional scientists, develop their abilities as confident, capable communicators, and understand how to publish and promote their research.

Teaching/Evaluation Methods

The course is organized into three modules: Oral Presentation, Manuscript Writing and Publication, and Public Communication. The teaching includes lectures, homework, and group or individual study. Evaluation is by means of an essay project including peer review of others' papers (1/3), class attendance and participation (1/3), and a final examination (1/3).

Lecture Schedule

- 4/07 Oral Presentation | Global Communication (Vagins)
- 4/14 Manuscript Writing | Writing as a Scientist (Harris)
- 4/21 Oral Presentation | Dealing with People (Vagins)
- 4/28 Oral Presentation | Preparing a Scientific Presentation (Vagins)
- 5/19 Oral Presentation | How to Deliver a Scientific Presentation (Vagins)
- 5/26 Oral Presentation | Creating and Presenting Scientific Posters (Vagins)
- 5/30 Public Communication | Public Engagement (Burghall)
- 6/09 Manuscript Writing | Reading as a Scientist (Harris)
- 6/1 Manuscript Writing | Writing Your Paper (Harris)
- 6/23 Manuscript Writing | Publishing Your Paper (Harris)
- 6/30 Public Communication | Social Media (Palavalli Nettimi)
- 7/07 Public Communication | News Media (Kakubayashi)
- 7/14 Manuscript Writing | Academic Publishing (Harris)
- 7/21 Final Examination