

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

Rohan Mehra, Project Senior Specialist, Public Relations Group

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 study the major forms of scientific communication, develop their abilities as confident, capable communicators, and learn how to publish and promote their research.

Teaching/Evaluation Methods

The lectures are divided 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 (40%), a final examination (40%), and class attendance and participation (20%).

Lecture Schedule

- 4/05 **Manuscript Writing | Writing as a Scientist (KH)**
- 4/19 **Oral Presentation | Global Communication (MV)**
- 4/26 **Public Communication | Public Engagement (NB)**
- 5/10 **Oral Presentation | Dealing with People (MV)**
- 5/15 **Manuscript Writing | Writing Your Paper (KH)**
- 5/24 **Oral Presentation | Preparing a Scientific Presentation (MV)**
- 5/30 **Public Communication | News Media (MK)**
- 6/07 **Manuscript Writing | Reading as a Scientist (KH)**
- 6/14 **Manuscript Writing | Publishing Your Paper (KH)**
- 6/21 **Manuscript Writing | Academic Publishing (KH)**
- 6/28 **Oral Presentation | How to Deliver a Scientific Presentation (MV)**
- 7/05 **Public Communication | Research in Motion: The Power of Video Production (RM)**
- 7/12 **Oral Presentation | Creating and Presenting Scientific Posters (MV)**
- 7/19 **Final Examination**