

Course outline: Research communication, 7.5 credits (3*2.5 credits)

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Practical information:

Course coordinator: Magnus Boström, magnus.bostrom@oru.se

Course administrator: Ingela Abramsson, Ingela.abramsson@oru.se

Teachers from ORU:

Magnus Boström, Professor of Sociology, magnus.bostrom@oru.se

Åke Grönlund, Professor of Informatics, Ake.Gronlund@oru.se

Linda Harradine, Research Communicator, Linda.Harradine@oru.se

Maria Ojala, Associate Professor Psychology, Maria.Ojala@oru.se

Jan Olsson, Professor of Political Science, Jan.Olsson@oru.se

Noah Roderick, Senior Lecturer Rhetoric, Noah.Roderick@oru.se

Lina Tingö, Post doc, School of Medical Science lina.tingo@oru.se

Assimakis Tseronis, Associate Professor Rhetoric, Assimakis.Tseronis@oru.se

Axel Vikström, PhD student, Media and Communication Studies, Axel.Vikstrom@oru.se

From MDU:

Jonas Stier, Professor of Social Work, Jonas.Stier@mdu.se

Recorded inspiration lectures

Wikipedia as a tool for science outreach: <https://www.youtube.com/watch?v=s8TKd9fxaFc>

Lecture: Olle Terenius, Uppsala universitet

DN Debatt: https://www.youtube.com/watch?v=j_aMgt6l4K8

How to write a debate article

Lecture: Nils Öhman, former editor and head of the Op-Ed page DN Debatt, Dagens Nyheter

Syllabus (three courses á 2.5 credits):

<https://www.oru.se/contentassets/23b46e723c354ae39dae4465e00a8c5a/syllabus-researchcommunication-3-courses-in-1-pdf>

Learning outcomes: see syllabus.

Schedule: https://www.oru.se/contentassets/05b6dbe7fb494dda992dadfdc4ef6ffb/prel-schema-forskningskommunikation-vt2023_23-01-10.pdf

Lectures and Seminars: While attendance of lectures is not obligatory, it is highly recommended because it will provide you with content that is relevant for the seminars and the assignments. Attendance of the seminars is obligatory. For missed seminars, there will be a compensatory assignment.

Course literature:

Main literature is Massimiano Bucchi & Brian Trench (eds) (2021) *Routledge Handbook of Public Communication of Science and Technology*. Routledge. Available to read electronically via the ORU library. None of the lectures will follow this book strictly, but will draw on various chapter. However, it is expected that you refer to specific authors and chapters in the examination tasks for course module 1 and 2. Further instructions will be given later.

Information about additional course literature is provided below in the content description for each lecture/seminar.

Examinations:

In the course modules we use written assignments and mandatory/active participation at seminars. Further instructions will be given at the start of each course module.

Course module 1: Researcher's role in society

Introduction of course

Date: 14 Feb, 13.15-14.00

Teachers: Magnus Boström

Digital: <https://oru-se.zoom.us/j/4179872720>

Lecture 1: Researcher's role in society

Date: 15 Feb, 15.15-17.00
Teacher: Maria Ojala
Campus: P105

Maria Ojala will give a lecture about the following issues: What is science/research communication? What do Swedish policy documents and literature about science communication say about the role of science communication in society? What forms of science communications are there? The dilemmas and joys of communicating your research followed by personal reflections. A deeper dive into some specific areas of research communication (like popular scientific presentations, media contact, social media, and including external actors in research projects) and some advice based on personal experience.

Literature:

Bucchi, Massimiano & Trench, Brian (2021). Introduction: Science Communication as the Social Conversation Around Science. Ch 1 in Handbook of Public communication of Science and Technology

Davies, Sarah. R. (2021). An Empirical and Conceptual Note on Science Communication's Role in Society. *Science Communication*, 43(1):116-133. doi:[10.1177/1075547020971642](https://doi.org/10.1177/1075547020971642)

Horst, Maja & Davies, Sarah. R. (2021). Science communication as culture. Ch 11. In Handbook of Public communication of Science and Technology

Peters, Hans. P. (2021). Scientists as public experts. Expectations and Responsibilities. Ch 7. In Handbook of Public communication of Science and Technology

Väliverronen, Esa. (2021). Mediatization of Science and the Rise of Promotional Culture. Ch 8. In Handbook of Public communication of Science and Technology.

Lecture 2: How to cope with knowledge resistance

Date: 22 Feb, 15.15-17.00
Teacher: Maria Ojala
Campus: F103

Today we live in a complex society characterized by polarization and value conflicts. Performing and communicating research about topics like climate change, crime, healthy diets, migration, and Covid-19 are not seldom related to value conflicts, controversy, and knowledge resistance. In this lecture Maria Ojala will touch upon: (1) Challenges and obstacles you as a researcher could meet when communicating your research to a diverse public. (2) Some possible causes of these challenges (inattention, values, identity and habits/routines, confirmation bias, emotions and emotion regulation, the style of communicating and power relations). (3) How you can work with these challenges (taking account of values and emotions, debunking, inoculation, participatory approaches and trust).

Literature:

Einsiedel, Edna F. (2021). Public Participation on Science and Technology: Dialogue, Disputations and Collaborations. Ch. 15 In Handbook of Public communication of Science and Technology.

Hornsey, Matthew J. (2021). Why Facts Are Not Enough: Understanding and Managing the Motivated Rejection of Science. *Current Directions in Psychological Science*, 29(6) 583–591

Irwin, Allan (2021). Risk, Science and Public Communication: Third-order Thinking about Scientific Culture. Ch 9 In Handbook of Public communication of Science and Technology

Jylhä, K., & Stanley, S., Ojala, M., & Clarke, E. (2022). Science denial: A narrative review and recommendations for future research and practice. *European Psychologist*, <https://doi.org/10.1027/1016-9040/a000487>

Lewandowsky, Stephan et al. (2012). Misinformation and Its Correction: Continued Influence and Successful Debiasing. *Psychological Science in the Public Interest* 13(3) 106–131

Van der Linder, Sander et al. (2021). How Can Psychological Science Help Counter the Spread of Fake News? *The Spanish Journal of Psychology* (2021), 24, e25, 1–9.

Lecture 3: Researchers interaction with the public policy process

Date: 1 March, 15.15-17.00

Teacher: Jan Olsson

Campus: P267

From an empirical and normative-constructive perspective, this lecture addresses researchers' interaction with the public policy process in terms of different types of input, such as problematization, critic, and advice through different channels like investigations, direct communication, and media appearances. The lecture draws on insights from literature on policy analysis and communication as well as practice-based experiences of the lecturer. Difficult choices and dilemmas in communicating research perspectives and results are addressed and discussed in relation to public values such as objectivity, neutrality, and transparency. Those choices and dilemmas are also addressed in relation to different types of researcher roles, for instance the researcher as hired or employed expert or as external university scholar.

Literature:

Cairney, Paul & Kwiatkowski, Richard. (2017). How to communicate effectively with policymakers: combine insights from psychology and policy studies. *Palgrave Communications* 3. Link: [How to communicate effectively with policymakers: combine insights from psychology and policy studies | Humanities and Social Sciences Communications \(nature.com\)](https://www.nature.com/articles/s41599-017-0020-1)

Flyvbjerg, Bent (2012). Why Mass Media Matter to Planning Research: The Case of

Megaprojects. *Journal of Planning Education and Research*, vol. 32, no. 2, June 2012, pp. 169-81. Link: [\(PDF\) Why Mass Media Matter to Planning Research: The Case of Megaprojects \(researchgate.net\)](#)

Jones, Ben. (2020) Political Activism and Research Ethics. *Journal of Applied Philosophy*, Vol. 37, No. 2, May 2020. Link: [\(PDF\) Political Activism and Research Ethics \(researchgate.net\)](#)

Oliver, Kathryn & Cairney, Paul (2019) The dos and don'ts of influencing policy: a systematic review of advice to academics. *Palgrave Communications*, 5. Link: [189377068.pdf \(core.ac.uk\)](#)

Seminar: Reflections on various obstacles to research communication and what to do about them

Date: 15 March, 13.15-16.00 Teacher: Maria Ojala
Digital: <https://oru-se.zoom.us/j/65155388623>

The aim of the seminar is partly to provide space for in-depth discussions about knowledge resistance and other barriers to research communication and what to do about them, and partly to give an opportunity to discuss and get input on the written examination.

More information about the seminar will be given on February 13

Deadline for submitting the written examination task: Wednesday 22/3 at 17.00. Further information about the examination task will be given just before the start of the course (Feb 13).

Course module 2: Planning and integrating research communication

In this module we will look at what a communication plan entails, how and when to create one and how to use a communication plan to raise awareness about your issue or project.

Lecture 1: Introduction: planning and integrating research communication

Date: 23 March, 13.15-15.00
Teachers: Magnus Boström, Axel Vikström
Digital: <https://oru-se.zoom.us/j/4179872720>

Introduction of the 2nd course module. Boström will also share his experiences of integrating research communication. Axel Vikström will share his experiences of research communication from a doctoral student perspective.

Literature:

Cassidy, Angela (2021). Communicating the social sciences and humanities: Challenges and insights for research communication. Ch 12. In Handbook of Public communication of Science and Technology.

Schäfer, Mike S. and Metag, Julia. (2021) Audiences of science communication between pluralization, fragmentation and polarization. Ch 16 In Handbook of Public communication of Science and Technology.

VR. The English Summary, pp. 15-19 in the report “Jag vill men hinner inte”:

<https://www.vr.se/analys/rapporter/vara-rapporter/2019-09-25-jag-vill-men-hinner-inte.html>

Yearley, Steven (2021) Environmentalism as science communicators: Advocates and critics in an age of climate challenges. Ch 10 In Handbook of Public communication of Science and Technology

Lecture 2: A new academic (media) landscape

Date: March 24, 10.15-12.00

Teacher: Jonas Stier

Digital:

<https://mdh-se.zoom.us/j/2489575774?pwd=WmRHdk9KTjB1TFBGWGtYN1FKcmpsZz09>

Description of content

In this lecture, Jonas Stier gives an overview of a rapidly changing academic landscape characterized by globalization, medialization and digitalization. He describes how these changes have a profound impact on universities and researchers. Special attention is given to your role as future researchers where you will need to communicate research in different media and to a variety of target groups and with different interests and expectations and understandings of research and knowledge.

Workshop: Developing a communication plan.

Date: 28 March, 13.15-16.00

Teacher: Linda Harradine

Campus: room tba

In this workshop we will work hands on with a communication plan. We will address questions about purpose of communication, target groups, message, channels and evaluation – in connection to your research.

Lecture 3: Planning and integrating research communication

Date: 4 April, 10.15-12.00

Teacher: Åke Grönlund

Campus: room tba

Åke Grönlund will give his perspectives and reflections on own research communication and how he plans and integrates research communication in his research practice.

Lecture 4: Rhetorical approaches to genre

Date: 20 April, 13.15-15.00

Teacher: Noah Roderick

Campus: room tba

This lecture introduces the fundamentals of argument invention, disposition, language choice, and delivery from a rhetorical perspective. The lecture also includes rhetorical approaches to situational, audience and genre awareness.

Literature:

Bitzer, L. (1968). The rhetorical situation. *Philosophy and Rhetoric*, v. 1, 1-14.

Gross, A., Hamlin, A., Merck, B., Rubio, C., Naas, J., Savage, M. & DeSilva, M. (2019). *Technical writing*. Open Oregon Educational Resources. Chapter 14
<https://openoregon.pressbooks.pub/technicalwriting/>

Seminar: Presentation of communication plans

Date: 27 April, 13.15-16.00

Teachers: Linda Harradine and Noah Roderick

Campus: room tba

Students will present their communication plans and reflections.

In preparation for the seminar: students have written a communication plan and reflections according to the instructions for the written assignment. Further instructions will be given at the start of course module 2.

Deadline for submitting written examination task: 2 May. Further information about the examination task will be given at the start of the course module.

Course module 3: Research communication in practice

In this module, students have the chance to acquire knowledge and skills regarding the communication of research both within the academic community and in society at large. Students practice these skills through a series of workshops concerning research communication in both speaking and writing.

Attendance of the seminars and participation to the practical activities is obligatory. We recommend that students read the literature in advance of each seminar and come prepared for

the practical activities according to the instructions in order to benefit the most from the contents of this module. In case of absence, students will need to submit a compensatory assignment for each moment that they have missed.

Lecture 1: Introduction: Research communication in practice

Date: 2 May, 8.15-10.00

Teacher: Linda Harradine, Assimakis Tseronis

Campus: room tba

This lecture introduces the third course module Research communication practice and presents the practical and theoretical challenges when communicating research to a broader public. Assimakis gives a lecture part about oral communication of research and introduces the two assignments (elevator pitch and written assignment). Linda presents the challenges when communicating research to different target groups from the perspective of the practitioners of communication.

Literature:

Andreweg, Bas, De Jong, Japp, Van Brugel, Frederique. The first minutes of conference presentations: An analysis of the opening of 16 research papers. *2010 IEEE International Professional Communication Conference, Professional Communication Conference (IPCC)*, 2010 IEEE International, [s. 1.], p. 262–272, 2010. DOI 10.1109/IPCC.2010.5530018. <https://ieeexplore-ieee-org.db.ub.oru.se/document/5530018>.

Baram-Tsabari, A., & Lewenstein, B. V. (2017). Science communication training: what are we trying to teach?. *International Journal of Science Education, Part B*, 7(3), 285-300. <https://doi-org.db.ub.oru.se/10.1080/21548455.2017.1303756>

Milan, S., & Jacobs, R. (2014). *Public speaking*. BarCharts, Inc. ProQuest Ebook Central <https://ebookcentral-proquest-com.db.ub.oru.se/lib/universitetsbiblioteket-ebooks/detail.action?docID=4876952>

Storytelling in research. *Nat Biomed Eng* 2, 53 (2018). <https://doi.org/10.1038/s41551-018-0202-5>

Seminar 1: Practicing oral communication of research

Date: 9 May, 8.15-11.00

Teacher: Linda Harradine, Assimakis Tseronis

Campus: room tba

Students practice with the elevator pitch for the first time and receive feedback from the teachers. Instructions will be communicated at the beginning of the module.

Seminar 2: Interactive seminars

Date: 16 May, 13.15-16.00

Teachers: Linda Harradine, Assimakis Tseronis, Magnus Boström

Campus: tba

First part of the seminar: Students will make an elevator pitch again using feedback from the first seminar.

Second part of the seminar: Magnus will give an example of an interactive seminar based on his own research. We end with general discussion.

Lecture 2: Visualizing Science

Date: 17 May, 13.15-15.00

Teacher: Lina Tingö

Digital: <https://oru-se.zoom.us/j/69132622672>

Appealing layouts and illustrations are becoming increasingly important in science communication. In this lecture Lina will introduce Science Visualization, with an emphasis on poster design.

Literature:

Pedwell, Rhianna, Hardy, James, Rowland, Susan Effective visual design and communication practices for research posters: Exemplars based on the theory and practice of multimedia learning and rhetoric. *Biochemistry and molecular biology education*, [s. l.], v. 45, n. 3, p. 249–261, [s. d.]. <https://iubmb.onlinelibrary.wiley.com/doi/pdf/10.1002/bmb.21034>

Lecture and Workshop 3: Communicating research in writing

Date: 22 May, 13.15-15.00

Teacher: Assimakis Tseronis, Linda Harradine

Campus: room tba

How do we write a popular science article? Assimakis gives a short lecture about written communication and argumentation and structure of debate articles. In preparation, course participants should have already started thinking about the idea that they want to write their article about. Instructions will be provided at the introductory lecture of this module.

Literature:

Baram-Tsabari, A., & Lewenstein, B. V. (2013). An instrument for assessing scientists' written skills in public communication of science. *Science Communication*, 35(1), 56-85. <https://doi-org.db.ub.oru.se/10.1177/1075547012440634>

Ceccarelli, L. (2011). Manufactured scientific controversy: Science, rhetoric, and public debate. *Rhetoric & Public Affairs*, 14(2), 195-228. <https://web-s-ebsohost-com.db.ub.oru.se/ehost/pdfviewer/pdfviewer?vid=0&sid=44a0dc95-d693-45ae-b818-c1c3c864b72d%40redis>

Eliasson, Per-Olof (2021). Undvik de här fällorna om du vill få publicitet. *Universitetslärares*, 2 juni, 2021. <https://universitetslararen.se/2021/06/02/undvik-de-har-fallorna-om-du-vill-fa-publicitet/>

Fahnestock, J. (2020). Rhetorical Citizenship and the Science of Science Communication. *Argumentation* 34, 371–387. <https://doi.org/10.1007/s10503-019-09499-7>

Seminar 3: Writing lab

Date: 30 May, 10.15-12.00

Teachers: Linda Harradine, Assimakis Tseronis

Campus: room tba

Students come with a draft of their article and discuss with each other and the teachers about the challenges they found and receive feedback in order to improve their text for the final submission.

Deadline for submitting written examination task: **9 June**