



SUBJECT DATASHEET

Science Communication 2

BMEGT41A116

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

Science Communication 2

ID (subject code)

BMEGT41A116

Type of subject

contact hour

Course types and lessons

<i>Type</i>	<i>Lessons</i>
Lecture	2
Practice	2
Laboratory	0

Type of assessment

exam

Number of credits

6

Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
Dr. Kutrovázt Gábor	associate professor	kutrov@filozofia.bme.hu

Educational organisational unit for the subject

Department of Philosophy and History of Science

Subject website

<https://www.filozofia.bme.hu/>

Language of the subject

magyar - HU

Curricular role of the subject, recommended number of terms

Programme: **Communication and media studies Bachelor's Programme from 2021/22/Term 1**

Subject Role: **Compulsory elective**

Recommended semester: **4**

Direct prerequisites

Strong Tudománykommunikáció 1.

Weak None

Parallel None

Exclusion None

Validity of the Subject Description

Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 580251/13/2023 registration number. Valid from: 29.03.2023.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to acquaint students with conflicts against science and acquire skills that help them stand up for it. In the first part of the course, they get taught scientific problems that also affect society (climate change, genetic engineering, nuclear energy) and the debate between pseudoscience and science. Students can see examples of successful scholarly science communicators trying to help build awareness in society through lectures, documentaries, talk shows, or just movies. This section also presents different opportunities and challenges within the profession, like being a research group, institution, or zoo communicator. The second part of the course focuses on science communication toolboxes, such as language, presentation, visuality, and humor. The course helps students to succeed in the science communication profession with team and individual works.

Academic results

Knowledge

1. Solid knowledge of the most important social science conceptualizations needed to study the communication phenomena
2. Solid knowledge of the conceptualization for studying social processes
3. Solid knowledge of conceptualization for studying communication and media phenomena

Skills

1. Ability to recognize social and communication problems, and to choose appropriate solutions
2. Ability to make judgements in practical tasks, ability to make independent decisions
3. Analytical skills

Attitude

1. Openness to social change
2. Professional and moral stance
3. Openness to self-criticism and self-improvement

Independence and responsibility

1. Adoption and enforcement of professional standards
2. Proficiency in professional communication both in oral and written form
3. Responsible, professionally based social presence

Teaching methodology

Presentations, analytical practices, projects, individual and teamwork, written and oral offline and online communication, audiovisual and presentational techniques, usage of online social platforms.

Materials supporting learning

- Beck Mihály (2010) Humor a tudományban. Budapest: Akadémia.
- Bubik Veronika és tsai (2013) szerk. Vizualizáció a tudománykommunikációban. Budapest: Eötvös Loránd Tudományegyetem.
- Collins, H. M. és Evans, R. (2002) The Third Wave of Science Studies: Studies of Expertise and Experience. Social Studies of Science 32(2): 235–296.
- van Dam, Frans és tsai. (2020) szerk. Science Communication. An Introduction. Singapore: World Scientific.
- Kutrováts Gábor és tsai. (2008) A tudomány határai. Budapest: Typotex.
- Leßmöllmann, Annette és tsai. (2020) szerk. Science Communication. Boston–Berlin: De Gruyter.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The assessment of the formulated learning outcomes. Condition of signature: 70% participation of the classes. If the student has not come for 70% of the classes, they cannot get the signature.

Performance assessment methods

Partial performance evaluation (two midterm tests): complex written assessment of the knowledge and skills. The tests are mainly focusing on the application of knowledge, they put the recognition of problems and critical analysis in the forefront. The material of the exam and the time allotted for the exam are determined by the lecturer. If the student cannot reach the Pass [E] cannot get a signature. Partial performance evaluation (project): following the course materials of the semester, the student prepares, presents, and critiques a science communication project that the student can make individually or in teams Partial performance evaluation (homework): preparation and presentation of analyzes, short written, or audio/visual materials related to theoretical backgrounds. Partial performance evaluation (active participation): 70% active participation of the classes. If the student has not come for 70% of the classes, they cannot get the signature.

Percentage of performance assessments, conducted during the study period, within the rating

- 1. összegző teljesítményértékelés: 25
- 2. összegző teljesítményértékelés: 25
- részteljesítmény-értékelés (házi feladatok): 30

Percentage of exam elements within the rating

- részteljesítmény-értékelés (projektfeladat): 20

Conditions for obtaining a signature, validity of the signature

Az aláírás megszerzésének feltétele: 70%-os aktív jelenlét az órákon. Ha a hallgató nincs jelen az órák 70%-án, nem kaphatja meg az aláírást.

Issuing grades

Excellent	91
Very good	86-90%
Good	74-85%
Satisfactory	62-73%
Pass	50-61%
Fail	0-49%

Retake and late completion

Retakes and make-ups of the two midterm tests happen during the retake week.

Coursework required for the completion of the subject

Participation in contact hours	56
Preparation for exercises	20
Preparation for midterm exams	40
Preparation for homework	36
Preparation for project	28
összesen	180

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 13.03.2023.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

1. A tudománykommunikáció alapjai és lehetőségek. Tematika és követelmények. 2. Társadalmi konfliktusok a tudományban. A szakértőiség kérdése és a források hitelessége. Klímaváltozás, géntechnológia, atomenergia. 3. Áltudomány és tudomány kapcsolata. Hogyan védjük a tudományt és hogyan ne támadjuk az áltudományokat? 4. Tudománykommunikáció az egyetemeken és a kutatócsoportokban. 5. Intézményi tudománykommunikáció. Ipari szereplők és állatkertek. 6. Híres tudománykommunikátorok. Michael Faraday, David Attenborough, Stephen Hawking, Kip Thorne és Neil deGrasse Tyson. 7. 1. ZH 8. Nyelvezet és korosztályok. Tudománykommunikáció gyerekeknek és felnőtteknek. Tudatosságnövelő gyerekkönyvek. 9. Előadástechnika, a közönség figyelmének megragadása. Street science. 10. Kép és hang a tudománykommunikációban. Infografikák és adatvizualizációk. Zene a tudománykommunikációban. 11. Humor a tudományban, régen és ma. A Zállatorvos és az IFL Science. 12. A közönség bevonása. Citizen science projektek. 13. 2. ZH 14. Projektbemutató

Additional lecturers

Petschner Anna egyetemi tanársegéd petschner.anna@gtk.bme.hu

Egres Dorottya egyetemi adjunktus egres.dorottya@gtk.bme.hu

Approval and validity of subject requirements