SUBJECT DATASHEET

Science Communication 1

BMEGT41A115

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Science Communication 1

ID (subject code)	BMEGT41A115

Type of subject
contact hour

Course types and lessons

Type	*Lessons*
Lecture	2
Practice	2
Laboratory	0

Type of assessment
exam grade

Number of credits
6

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Karakas Alexandra	assistant professor	karakas.alexandra@gtk.bme.hu

Educational organisational unit for the subject
Department of Philosophy and History of Science

Subject website
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: **3**

Direct prerequisites

Strong	Nincs/None
Weak	Nincs/None
Parallel	Nincs/None
Exclusion	Nincs/None

Validity of the Subject Description
Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 580162/10/2026 registration number. Valid from: 18.03.2026.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to introduce the theoretical foundations of science communication and their traditional and non-traditional platforms with examples and practices. In the first part of the course, students will get a brief introduction about science, stereotypes of science and scientists, and science communication theories. The second part of the course introduces the traditional platforms of science communication, such as online and offline science journalism and electronic media, i.e. radio and TV programs. In the third part of the course, the non-traditional platforms will be presented, including complex science projects, bottom-up initiatives (e.g. meet-ups), and science blogs and vlogs. Science and scholarly images are shown in literature and films/series, and new opportunities such as science cafés and science art will also be analyzed. The course helps students acquire knowledge of science communication through group and individual tasks, emphasizing the acquisition of practical experience.

Academic results

Knowledge

1. Solid knowledge of the most important social science conceptualizations needed to study the communication phenomena.
2. 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

Independence and responsibility

1. Display one's own worldview in a professional setting
2. Independence
3. Proficiency in professional communication both in oral and written form

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

- van Dam, Frans és tsai. (2020) szerk. Science Communication. An Introduction. Singapore: World Scientific.
- Egyed László és tsai. (2012) A tudománykommunikáció nem hagyományos színterei. Budapest: Eötvös Loránd Tudományegyetem.
- Gregory, Jane és Miller, Steve (2000) Science in Public. Cambridge, UK: Perseus.
- Haynes, Roslynn D. (2017) From Madman to Crime Fighter: The Scientist in Western Culture. Johns Hopkins University Press.
- Kárpáti Andrea és Vásárhelyi Tamás (2011) szerk. Múzeumi tanulás. Budapest: Typotex.
- Lewenstein, Bruce V. (2003) Models of Public Communication of Science and Technology. https://ecommons.cornell.edu/bitstream/handle/1813/58743/Lewenstein.2003. Models_of_communication.CC%20version%20for%20Cornell%20eCommons.pdf?sequence=3&isAllowed=y.
- Palugyai István és tsai. (2011) Tudományos újságírás. Budapest: Tudományos Újságírók Klubja.

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 (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

- **részteljesítmény-értékelés (házi feladatok)**: 40
- **aktív órai részvétel**: 20
- **összesen**: 60

Percentage of exam elements within the rating

- **Partial performance evaluation (project)**: 40
- **összesen**: 40

Conditions for obtaining a signature, validity of the signature

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

Issuing grades

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

Retake and late completion

One of the homeworks can be resubmitted during the retake week.

Coursework required for the completion of the subject

részvétel a kontakt tanórákon	56
félévközi készülés a gyakorlatokra	20
felkészülés a teljesítmény értékelésekre	40
Homework	36
projektfeladat felkészülés	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: 02.03.2026.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

Basics of science communication, purpose, audience, traditional and non-traditional scenes of science communication. Topics, requirements. How
does science work? The relationship between science and science communicators. Science communication organizations. Theoretical models
of science communication. Stereotypes about science, scientists (social scientists and naturalists). Traditional forms of science communication.
Offline scientific journalism. News, interview, essay. Electronic media. Radio and television programs. Online scientific journalism. Similarities and differences between offline and online journalism. Non-traditional forms of scientific communication. Scientific cafes.
Scientific art. Scientific meeting. Scientific debates. Educational lectures. Complex scientific projects. University of All Knowledge. Scientific
festivals and events. The Budapest Science Festival. Museums and exhibitions, museum pedagogy. Science center. Literature and film. Horror and sci-fi. Pop culture stereotypes and their changes. Researcher blogs and vlogs. Scholars on social media sites (Facebook and Twitter).

Additional lecturers

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

Approval and validity of subject requirements