



**SUBJECT DATASHEET**

**ARGUMENTATION TECHNIQUES AND LOGIC**

**BMEGT418959**

# I. SUBJECT DESCRIPTION

## 1. SUBJECT DATA

### Subject name

ARGUMENTATION TECHNIQUES AND LOGIC

### ID (subject code)

BMEGT418959

### Type of subject

contact lessons

### Course types and lessons

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

### Type of

### assessment

seminar grade

### Number of

### credits

2

### Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
Dr. Kutrovátz Gábor	associate professor	kutrovatz.gabor@gtk.bme.hu

### Educational organisational unit for the subject

Department of Philosophy and History of Science

### Subject website

<https://edu.gtk.bme.hu>

### Language of the subject

magyar - HU és angol - ENG

### Curricular role of the subject, recommended number of terms

### Direct prerequisites

*Strong* None

*Weak* None

*Parallel* None

*Exclusion* None

### Validity of the Subject Description

Approved by the Faculty Board of Faculty of Economic and Social Sciences. Valid from 29 April 2020.

## 2. OBJECTIVES AND LEARNING OUTCOMES

### Objectives

How to decide whether to accept or reject the argument that we read in our favourite dailies and weeklies? What tools do we have for such an inquiry? Are there any boundaries that should be taken into account when composing and presenting an argument? Within the subject we seek to find answers to similar questions. It is going to unfold what remains from an article after a careful application of argumentation techniques and we are going to discuss how to bring a prima facie hardly defensible position to success. Moreover, students are going to be encouraged to participate in grand-scale debates about hot topics by using the recently learned argumentative toolkit.

### Academic results

#### Knowledge

1. the fundamentals of the methodology of social sciences.
2. the occurrences and the consequences of the relations between science, education, society and media on various levels.
3. how the discipline being studied fits into a larger disciplinary and social scheme, how it relates to the neighbouring fields, how these fittings give rise to using certain contexts.
4. the fundamentals of various mechanisms of social decision-making.

#### Skills

1. to use professional terms, basic concepts and advanced elements of the special terminology of the profession.
2. to see and treat science in its embeddedness, to use an interdisciplinary approach.
3. to analyze, evaluate, draw conclusions and synthesize explanations in their professional work.
4. to provide a critical analysis of information by using a wide array of well-founded techniques.
5. to participate in lifelong learning.
6. to use a multi-sided, interdisciplinary approach to identify specific problems, to explore and define the detailed theoretical and practical background that is needed to solve these problems.
7. to discover facts and basic relationships by applying the theories and methods learned. To systematize, to analyze, to draw conclusions, to give critical remarks, to prepare proposals of decision-making and to make decisions both in a routine and in a non-routine - domestic and international - environment.

#### Attitude

1. Accepts and consistently and plausibly represents the diversity of the perspectives of social sciences in the related narrower and wider environment.
2. Demonstrates an open mind to critical self-evaluation, to various forms of training, to the self-help forms of intellectual worldview. Endeavours for self-development in these areas.
3. Has problem-centric perspective and problem-solving thinking.

#### Independence and responsibility

1. Develops a historically and politically consistent individual opinion in the narrow disciplinary niche that helps to develop self and environment.
2. Becomes autonomous, constructive and assertive both in intra- and extra-institutional forms of cooperation.
3. Becomes self-reliant in work besides being constantly critical and correcting own work.
4. Takes the responsibility in forming and justifying professional views.
5. Takes the responsibility for own analyses, conclusions and decisions.

### Teaching methodology

Written and oral communication.

### Materials supporting learning

- PPT-k a tárgy Moodle oldalán. Slides on the Moodle site of the subject.
- Bognár László – Forrai Gábor (2004): Esszéírás és Informális logika. Miskolc:
- <http://www.uni-miskolc.hu/~bolantro/informalis/index.html>
- Margitay Tihamár (2007): Az érvelés mestersége. Érvelések elemzése, értékelése és kritikája. Budapest: Typotex.
- [http://www.tankonyvtar.hu/hu/tartalom/tamop425/2011-0001-526\\_margitay\\_az\\_erveles/adatok.html](http://www.tankonyvtar.hu/hu/tartalom/tamop425/2011-0001-526_margitay_az_erveles/adatok.html)
- Zentai István (1998): A meggyőzés útjai. A mindennapi élet meggyőzőpszichológiája. Budapest: Typotex.

## II. SUBJECT REQUIREMENTS

### TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

#### General Rules

Assessment of learning outcomes described under section 2.2.

#### Performance assessment methods

General course assessment: Complex assessment of the acquired knowledge and skills concerning knowledge production by two written exams.

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

- 1. General course assessment (test): 50%
- 2. General course assessment (test): 50%
- total: 100%+

#### Percentage of exam elements within the rating

#### Conditions for obtaining a signature, validity of the signature

#### Issuing grades

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

#### Retake and late completion

Both tests need to be at least a Pass. Only one of the tests are to be retaken on the retake week.

#### Coursework required for the completion of the subject

participation in contact hours	14×2=28
preparation for contact hours	0
preparation for partial performance evaluation	2×16=32
home works	0
self-study of designated written material	0
preparation for exam	0
total	60

#### Approval and validity of subject requirements

Consulted with the Faculty of Student Representative Committee, approved by Emma Lógó, Phd, Vice Dean for Education. Date: ....  
Valid  
from September 1, 2017.

# III. COURSE CURRICULUM

## THEMATIC UNITS AND FURTHER DETAILS

### Topics covered during the term

In order to achieve the learning outcomes set out in point 2.2, the subject consists of the following thematic blocks. In the syllabuses of the courses announced in each semester, we schedule these thematic elements according to the calendar and other features.

- 1 Introduction. The subject of argumentation. The concept of arguments, types of disputes. Purpose and means of the debate. Manipulating the debate. The benefits of reasoning.
- 2 Concepts of reasoning and argument. Evaluation of arguments: strength vs. effectiveness. Statement, premise, conclusion. How to find it? The connection of the premises. Reconstruction of arguments. Circular argument. Internal, external criticism.
- 3 The concept and general rules of rational argumentation. Standpoint rule: illegitimate change of position, straw man, shadow boxing. Burden of proof rule and its violations: evading the burden of proof, illegitimately passing the burden of proof, appealing to ignorance.
- 4 Arguments for reasoning 2. Emotions and expertise. Appeal to emotions: appeal to pity, appeal to fear, reference to reward, appeal to public opinion, "others do the same", reference to group pressure. Cognitive and emotional meaning. Reclassification. Errors of reasoning affecting authenticity: personification, expiration of the person, reference to the bias of the person. When personalization is not at fault. The answer to personalization. Reference to authority, reference to bad expert, one-sided reference, misinterpretation of expert, unidentifiable reference. Criticism of arguments based on authority.
- 5 Symmetrical and asymmetrical debate. Faulty questions: dangerous and too general questions. Dangerous issues: aggressive, complex and overly assertive issues. Hypothetical questions. Direct and indirect answer, side-talk. Techniques of public response.
- 6 Debating
- 7 Test
- 8 Concepts of validity, strength, plausibility. Valid and invalid conclusions. Inductive arguments and their common mistakes. Data usage and errors. Analogies.
- 9 Elementary and complex statements. Logical operations. Negation, conjunction, alternation. Conditions of justice. De Morgan rules. Disjunctive syllogism and false dilemma.
- 10 Concept of conditional, condition of truth. Language versions of the conditional. Conditional expression with other logical operations. Modus ponens, modus tollens. Conditional reasoning errors: antecedent error, consequence assertion error. Biconditional.
- 11 Test preparation, debating
- 12 Test

### Additional lecturers

Egres Dorottya	egyetemi tanársegéd, assistant lecturer	egres.dorottya@filozofia.bme.hu
Elek Nikolett,	doktorandusz, PhD student	nikolett.elek@gmail.com
Geng Viktor	doktorandusz, PhD student	geng.viktor@filozofia.bme.hu
Gyarmathy Ákos,	egyetemi tanársegéd, assistant lecturer	gyarmathy@filozofia.bme.hu

### Approval and validity of subject requirements

Part I-III of the Subject Form is to be approved by the Head of Department of Philosophy and History of Science named under 1.8.