ARGUMENTATION THEORY

Aims, content, and methods
In accordance with the current University of Vienna COVID-19 guidelines, the course is planned the take place entirely on-site. If the situation so demands, there might be changes to this (e.g. individual classes in a digital format).

Argumentation is everywhere: we argue at home, at school, at work, in the courtroom, and in parliament. As such, argumentation is the basis of how we live together and form a society. In this course, students will be equipped with basic argumentation skills. They will learn about rhetorics, the use of logic in arguments, and most importantly - argue in practice.

The course consists of lectures followed by in-class exercises in argumentation. It consist of three parts. In the first part, we cover the basics of argumentation and logical arguments. In the second part, we explore the essentials of critical discussion and forms of reasoning. In the third part, we look at ways argumentation can go wrong, exploring fallacies and biases.

Teacher
Dr. Wessel Reijers
Department of Philosophy, University of Vienna; Department of Philosophy, Technion; Robert Schuman Centre, European University Institute.
Email: wessel.reijers@univie.ac.at

Assessment
The assessment will consist of:
- 30% in-class exercises
- 30% take-home exam (in April)
- 40% final exam

Teaching format
- The course will take place entirely in English
- Lectures take place in blocks, on Wednesday and Thursday
- On each of these days, there is one block session, consisting of a lecture and a practical exercise session (each block starts at 8:00 in the morning)
- The exact times and rooms can be found here: https://ufind.univie.ac.at/de/course.html?lv=180179&semester=2022S

Additional resources
- How to structure a good argument: https://www.lib.sfu.ca/about/branches-depts/slc/writing/argumentation/templates-structuring-argumentative-essays

Sessions	
Session # 1 09.03.2022 08:00-12:00	Topic: Introduction to Argumentation Sup-topics: - Aims, content, and method of the course - Argumentation in everyday life - Why argumentation matters - Claims, reasons, and arguments

	- Parts of an argument - Outline of assessment **Description:** In this first session, you will be made acquainted with the basics of argumentation in philosophy. We start by discussing the nature of an argument, and its basis in reasons leading to a conclusion. We introduce the notions of (hidden) premises, claims, form, content, and context. Furthermore, we introduce types of argumentations, for instance inductive and deductive. Throughout the session, we will discuss interesting examples of arguments as they are used in different contexts. **In-class Exercise I: 12 Angry Men** During this in-class exercise, we will first together watch the short movie from 1957 called 12 Angry Men. This movie is all about argumentation, focusing on a members of a jury who discuss the guilt or innocence of a young man who is sentenced to death. You will be asked to take notes during the movie and later discuss in groups which basic elements of rhetoric and argumentation you were able to recognize. **Replacement exercise: 12 Angy Men** 1. Watch the German version of 12 Angry Men, which is freely accessible on Youtube (see https://www.youtube.com/watch?v=8tKBrdThPdQ&t=793s); if you don't speak German well enough, please send me an email and I'll share the file of the English movie with you. Watch at least 1 hour of the movie. 2. Capture some of the core arguments in the movie: what are the premises? What are the conclusions? Which rhetoric strategies are used (ethos, pathos, logos) and what types of arguments (e.g., deliberative or forensic)? 3. Structure the argument in the form of a 'mind map.' You can do this in a word document or a powerpoint document, or use an online tool (e.g., https://xmind.works/) ; 4. Send the mind map to me by email (wessel.reijers@univie.ac.at) by April 4 (no later!). Please send it to me in PDF format. **Readings:** - Baggini, Julian and Peter S. Fosl. 2010. *The Philosopher's Toolkit*. Chichester: Wiley-Blackwell. Chapter 1.1. - Fisher, Alec. 2004. *The Logic of Real Arguments*. Cambridge: Cambridge University Press. Introduction.
Session # 2 10.03.2022 08:00-12:00	Topic: What is an argument? Sup-topics: - Analysing an argument - Form and content of an argument - Validity and soundness - Types of arguments **Description:** In this second session, we discuss what an argument is and how it can be dissected. We discuss the method one can use to analyze an argument. We discuss the distinctions between form and content of an argument; as well as between its validity and soundness. We will

perform some in-depth analyses of famous arguments, to demonstrate how they can be dissected and what we learn from doing so.

In-class Exercise II: In-class debate – is the killing of animals for meat consumption murder? Should there be a vaccination duty to mitigate the COVID19 pandemic?
During this in-class exercise, the group will be divided into four teams; two teams will be assigned to argue in favor or against the two questions that are central to the debate. For the first 20 minutes, groups will have time to prepare their arguments. Following this, each two groups will have a lower-house style debate of 20 minutes about one of the two topics. While two groups are debating, the other students have to carefully follow the debate and take notes on the structure of the respective arguments. Finally, each group has to create an analysis of the argument that it *observed* in the debate, and report this back to the plenary.

Replacement exercise: analyzing a debate
1. Watch the following famous debate between Noam Chomsky and Michel Foucault: https://www.youtube.com/watch?v=3wfNl2L0Gf8&t=598s. While watching, take notes for one of the arguments of either discussant. Identify premises and conclusions.
2. After watching, structure your notes and analyse the argument. This means putting the argument in a schematic form (see lecture slides and the readings on how to do this). You don't need to include all arguments in the debate but focus on 2 or 3 ones that capture the core of what one of both philosophers is arguing.
3. Write a short evaluation of one of the arguments that you structured in a schema. Comment on its validity and soundness. Do you think the argument is valid? If so, why? And do you think it is sound? If so, why?
4. Send your findings to me by e-mail (wessel.reijers@univie.ac.at) by April 4 (no later!). Please send it to me in PDF format.

Readings:
- Fisher, Alec. 2004. *The Logic of Real Arguments*. Cambridge: Cambridge University Press. Chapter 2.
- Baggini, Julian and Peter S. Fosl. 2010. *The Philosopher's Toolkit*. Chichester: Wiley-Blackwell. Chapter 1.4-1.6.

Session # 3

12.05.2022

08:00-12:00

Topic: Logical arguments

Sub-topics:
- What is logic?
- Why logic?
- Logical syllogisms
- Statements and propositions

Description:
In this third session, we discuss the importance of logic in philosophical argumentation, and outline some elementary aspects of formal logic. We start by discussing the importance of logical rigor in argumentation, and some implementations of logic beyond philosophy, in mathematics and computer science. We then discuss types of logic (e.g., propositional and relational) and logical syllogisms. Subsequently, we turn to statements and propositions, as well as the use of logical symbols and truth tables.

In-class Exercise III: Logic Puzzles

	During this in-class exercise, students will do three group assignments. For the first assignment, they are asked to make a Venn diagram with three different statements. Based on this diagram, they are asked to create different logical propositions. For the second assignment, students are asked to fill in truth tables based on logical propositions. For the third assignment, there is a table containing names of four friends. Students are asked to find out which friends like or don't like one-another, based on logical propositions.
	
	Readings:
	    1. Fisher, Alec. 2004. *The Logic of Real Arguments*. Cambridge: Cambridge University Press. Appendix.
	    2. Vaughn, Lewis. 2016. *The Power of Critical Thinking*. Oxford: University of Oxford Press. Chapter 3.

Session # 4
 	
13.05.2022
 	
08:00-12:00
	Topic: Critical discussion
	
	Sub-topics:
	• Critical thinking
	• Moral and legal arguments
	• Worldviews
	• Open-mindedness
	• Ideology
	
	Description:
	In this fourth session, we engage with the broad topic of critical thinking. We start by discussing the value of critical thinking, and of holding true and false beliefs. Continuing, we look at the value of critical thinking for setting up moral and legal arguments, emphasizing some paradigmatic examples. Subsequently, we also discuss the importance of taking people's worldviews (religious, scientific, cultural) into account in critical thinking. Finally, we pay attention to the role of open-mindedness and ideology as background conditions of our ability to think and argue critically.
	
	In-class Exercise IV: Believing Game and Doubting Game
	During this in-class exercise, students will engage in two games: a believing game and a doubting game. The theme of their discussion will be Henry Thoreau's case for civil disobedience. In the first half of the session, students are asked to suspend judgment and argue in favor of Thoreau's case from their perspectives. In the second half, they are invited to thoroughly question Thoreau's argument, and find out which are good and bad questions. In-class debate session
	
	Readings:
	    1. Vaughn, Lewis. 2016. *The Power of Critical Thinking*. Oxford: University of Oxford Press. Chapter 9.
	    2. Fisher, Alec. 2004. *The Logic of Real Arguments*. Cambridge: Cambridge University Press. Chapter 6.

Session # 5 09.06.2022 08:00-12:00	Topic: Inductive and Deductive Arguments Sup-topics: • Hypothetico-Deductive Model • Falsification

	• Enumerative Induction • Analogical Induction • Causal Reasoning • Probabilistic Reasoning **Description:** In this fifth session, we engage in a more detailed manner with forms of deductive reasoning and the role they play in everyday and scientific reasoning. We start by considering deduction in the scientific method, looking at some paradigmatic models for scientific knowledge production and the importance of falsification. We then turn to inductive reasoning, outlining and evaluating different forms of induction. Finally, we discuss the basics of causal and probabilistic reasoning. **In-class exercise:** We will engage in two small and one larger in-class exercises. First, we do a falsification and confirmation bias test, where students have to infer a rule based on a sequence of observations. Second, we do a game in which students are asked to apply the scientific method to investigate an unknow object they find in front of them. Third, students will do an in-class "grounded theory" exercise. They will do research to find out about the music style taste of their fellow students. **Readings:** 1. Vaughn, Lewis. 2016. *The Power of Critical Thinking*. Oxford: University of Oxford Press. Chapter 8. 2. Baggini, Julian and Peter S. Fosl. 2010. *The Philosopher's Toolkit*. Chichester: Wiley-Blackwell. Chapter 1.2, 1.3, 2.2, and 2.4 3. Fisher, Alec. 2004. *The Logic of Real Arguments*. Cambridge: Cambridge University Press. Chapter 10.
Session # 6 10.06.2022 08:00-12:00	Topic: Fallacies and Biases Sub-topics: • When reasoning goes wrong • Core fallacies • Formal Fallacies • Informal Fallacies • Biases • Recognizing fallacies and bias **Description:** In this sixth session, we look into ways how reasoning and argumentation can go wrong. We start out by looking at concrete examples of reasoning going wrong. We then turn to the theme of fallacies, exploring core fallacies in reasoning, formal, and informal ones. We then turn to cognitive and other types of biases that affect our reasoning capabilities, and finally ask how we can recognize fallacies and biases in reasoning. **In-class Exercise IV: Believing Game and Doubting Game** During this class, students will engage with two exercises. The first is the Monty Python witch hunt exercise, in which students are asked to watch a Monty Python clip, reconstruct the argument made, and find fallacies in the sub-arguments. The main focus is teaching the

	fallacy of the undistributed middle. The second is a set of 5 exercises that students perform to practically understand how cognitive biases operate.
	Readings:
	1. Vaughn, Lewis. 2016. *The Power of Critical Thinking*. Oxford: University of Oxford Press. Chapter 4 and Chapter 5.
	2. Baggini, Julian and Peter S. Fosl. 2010. *The Philosopher's Toolkit*. Chichester: Wiley-Blackwell. Chapter 1.7