

## COURSE OF STUDY Philosophy ACADEMIC YEAR 2023/2024 ACADEMIC SUBJECT Logic and Philosophy of Science

General information	
Year of the course	Third year
Academic calendar (starting	Second semester (26-02-24/15-05-24)
and ending date)	
Credits (CFU/ETCS):	9 CFU
SSD	M-FIL 02
Language	Italian
Mode of attendance	Attendance optional but strongly recommended

Professor/ Lecturer	
Name and Surname	Luca San Mauro
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Telephone	
Department and address	Dipartimento di Ricerca e Innovazione Umanistica – Palazzo Ateneo, Bari
Virtual room	Microsoft Teams: <u>lucafrancesco.sanmauro@uniba.it</u>
Office Hours (and modalities:	Friday 09-11, by appointment only
e.g., by appointment, on line,	
etc.)	

Work schedule			
Hours			
Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
225	63		162
CFU/ETCS			
9 CFU			

Learning Objectives	Understanding of the main notions of classical logic (truth, validity, provability), their delicate interaction, and the formal tools to investigate them.
Course prerequisites	There are no prerequisites.

Teaching strategie	Lectures with high engagement of the students. To favour proper understanding of abstract notions, the lecturer will offer a plethora of examples.
Expected learning outcomes	
in terms of	
Knowledge and	<ul> <li>Knowledge on the delicate interplay between the key concepts of</li> </ul>
understanding on:	classical logic: truth, validity, provability, etc.
Applying knowledge and	<ul> <li>Using classical logic to formalize statements coming from both</li> </ul>
understanding on:	ordinary and scientific discourse.
Soft skills	Making informed judgments and choices:
	<ul> <li>Judging which arguments are logically sound.</li> </ul>



## DIPARTIMENIO DI RICERCA E INNOVAZIONE UMANISTICA

	Communicating knowledge and understanding:
	$\circ$ Communicating both the formal aspects of logic and their
	philosophical environment.
	Capacities to continue learning:
	• Developing the ability of understanding philosophical texts
	which adopt symbolic logic.
Syllabus	
Content knowledge	The course proposes an introduction to classical logic. We will mainly focus
	on propositional and first order logic, with special attention paid to the
	connection between logic and philosophy of science.
Texts and readings	– V. Halbach, The logic manual, Oxford University Press (2010)
	– P. Smith, An introduction to formal logic, Cambridge University Press
	(2020)
	– Course slides
Notes, additional materials	
Repository	The lecturer will make digital copies of the reference texts available.

Assessment	
Assessment methods	Oral exam. The exam schedule is published on Esse3. To register for the
	exam, it is mandatory to use the Esse3 system.
Assessment criteria	<ul> <li>Knowledge and understanding:         <ul> <li>The student should know the main concepts of classical logic, together with (part of) their philosophical content.</li> </ul> </li> <li>Applying knowledge and understanding:         <ul> <li>The student should be able to work within some logical systems, e.g., truth tables and natural deduction.</li> </ul> </li> <li>Autonomy of judgment:         <ul> <li>The student should be able to judge whether a given argument is logically sound or not.</li> </ul> </li> <li>Communicating knowledge and understanding:         <ul> <li>The student should be able to communicate the formal definitions of the main logical concepts.</li> </ul> </li> <li>Communication skills:         <ul> <li>The student should be able to discuss the philosophical motivations of the main formal notions introduced in the course.</li> </ul> </li> <li>Capacities to continue learning:         <ul> <li>The student should be able to understand contemporary philosophical texts which adopt logical formalism.</li> </ul> </li> </ul>
Final exam and grading criteria	Individual preparation will be assessed through an oral exam on the program
	content. The final grade is calculated on a 30-point scale with 18 being the
	lowest passing grade.
Further information	