

## 25507 - Introduction to Logic.

### Syllabus Information

**Academic year:** 2023/24

**Subject:** 25507 - Introduction to Logic.

**Faculty / School:** 103 - Facultad de Filosofía y Letras

**Degree:** 269 - Degree in Philosophy  
587 - Degree in Philosophy

**ECTS:** 6.0

**Year:** 1

**Semester:** Second semester

**Subject type:** Basic Education

**Module:**

### 1. General information

"Introduction to Logic" is part of the area Logic and Philosophy of Science. The learning activities have been designed to serve as an introduction to the concepts and methodologies of the subjects of the area. All this by familiarizing the students with the practice of argumentation in the formal framework defined by first-order logic.

The above is aligned with the following Sustainable Development Goals of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>): Goal 4: Quality Education; Goal 5: Gender Equality; Goal 10: Reducing Inequalities; Goal 11: Sustainable Cities and Communities; Goal 12: Responsible Production and Consumption; Goal 13: Climate Action; Goal 16: Peace, Justice and Strong Institutions

### 2. Learning results

- Possess sufficient knowledge to understand the most important concepts and theories of the history of philosophy, relating them to others from the same or different periods.
- Possess sufficient knowledge to understand the fundamental concepts and theories of philosophical thought, knowing how to relate them to each other and to the different branches of philosophy.
- Know the logic of language, being able to use it accurately and being attentive to the deceptions and errors that can result from its misuse
- Become familiar with the main milestones in the history of our discipline.
- Have the ability to interpret philosophical texts, placing them within their cultural context and intellectual traditions.
- Be able to analyse the structure of complex and controversial problems, detecting, formulating and proposing alternative approaches to philosophical problems in various historical and contemporary fields of society, science and culture.
- Be able to use the knowledge acquired to illuminate and evaluate the problems raised by contemporary science.
- Be able to use the knowledge acquired to understand and interpret the present in all its complexity, justifying the position in the face of the fundamental problems that afflict us.
- Be able to handle the scientific methodology in its analytical, synthetic, inductive and deductive aspects.
- Be able to transmit information, concepts and philosophical theories to specialized and non-specialized audiences

### 3. Syllabus

Topic 1. History of logic

Topic 2. The language of logic

Topic 3. Propositional logic

Topic 4. First order logic

### 4. Academic activities

Learning is based on face-to-face classes. These will have a duration of two hours. In them, the teacher will explain the most important concepts and theses. Students should complement the explanations with the recommended readings in the bibliography. In logic it is important to solve practical exercises, so the teacher will dedicate a good part of the classes to this activity. It is recommended that students attend tutorials to resolve doubts in this aspect of their learning.

Learning activities:

- Theoretical classes.

- Practical classes.
- Work and personal study.
- Assessment tests or activities

## 5. Assessment system

### FIRST CALL

Global assessment test (to be taken on the date established in the academic calendar).

A) CHARACTERISTICS. The acquisition of philosophical knowledge is evaluated based on the subject syllabus. The written test will consist of two questions for each of Topics 3 and 4 and one for Topics 1 and 2 as a whole. The questions for Topics 3 and 4 include truth table solving, statement formalization and natural deduction. The question for Topics 1 and 2 will be primarily historical and/or philosophical in content.

### B) ASSESSMENT CRITERIA

1. Satisfactory resolution of truth tables according to the methods worked on in class (topic 3) (20%)
2. Correct answer to the theoretical questions (topics 1-2) (30%)
3. Correct formalization of statements in formal language, following the guidelines and methods practiced in class (topics 3 and 4) (25%)
4. Correct deduction of formal arguments using the methods, rules and logical laws studied in class (topics 3 and 4) (25%)

### SECOND CALL

Same as in the first call