

Formal Logic Course Descriptor

Course Title	Formal Logic	Faculty	Philosophy
Course Code	NCHPH752	Course Leader	Dr Ioannis Votsis
Credit Points	15	Teaching Period	Either
FHEQ Level	Level 7	Date Approved	June 2020
Compulsory/ Optional	Optional		
Pre-requisites	None		
Co-requisites	None		

COURSE SUMMARY

This course introduces students to the study of logic. This study concerns the language and tools of classical elementary logic (both propositional and predicate) and addresses questions about the relations between artificial and natural languages. It cultivates the ability to translate complex natural language passages into formal claims and arguments with a view to assessing the validity of arguments and the consistency of sets of sentences. The course provides a strong foundation in the methodology of philosophical argumentation.

COURSE AIMS

The aim of this course is to:

- Provide a strong foundation in elementary formal logic.
- Develop students' engagement with central logical concepts, techniques and rules.
- Promote an active understanding of the philosophical issues surrounding such notions as truth, validity and consistency.

LEARNING OUTCOMES

On successful completion of the course, students will be able to:

KNOWLEDGE AND UNDERSTANDING

- K1d Demonstrate wide-ranging knowledge of, and recognition of systematic connections between, questions and debates in logic; apply the vocabulary and

employ the techniques of formal logic to articulate and critically assess natural language arguments.

K3d Show a fine grasp of logical structure and truth-preserving patterns of inference.

SUBJECT SPECIFIC SKILLS

S1d Make original use of advanced scholarly techniques to clarify and situate ideas and arguments from logic..

S2d Engage with unfamiliar material at the forefront of the discipline, selecting and analysing information, questioning assumptions, and critically evaluating competing methodologies, sources of data and arguments.

TRANSFERABLE AND PROFESSIONAL SKILLS

T1d Take initiative and personal responsibility; work independently, effectively, and to deadlines.

T2d Respond systematically and creatively to complex, wide-ranging, and unpredictable data, theories, and arguments.

T3d Display self-direction to produce original, sophisticated, clear, and persuasive presentations (written and oral).

T3d Consistently apply an excellent level of technical proficiency in written English, using an advanced application of scholarly terminology, that demonstrates the ability to deal with complex issues both systematically and with sophistication.

TEACHING AND LEARNING

Teaching and learning strategies for this course will include:

- 15 hours of lectures and exercise-solving sessions
- One 1-hour one-to-one tutorial

Course information and supplementary materials are available on the College's Virtual Learning Environment (VLE).

Students are required to attend and participate in all the formal and timetabled sessions for this course. Students are also expected to manage their directed learning and independent study in support of the course.

EMPLOYABILITY SKILLS

The study of philosophy cultivates skills that are employable across a range of sectors. These include the abilities to:

- Work independently, creatively, and to deadlines
- Conduct research and explore relevant existing knowledge
- Analyse, contextualise, and interpret complex ideas and materials
- Synthesise and evaluate information against a backdrop of uncertainty
- Solve problems through logical reasoning

- Present findings and opinions in a clear, structured manner, whether orally or in writing
- Engage in collaborative and constructive discussion

ASSESSMENT

FORMATIVE

Students will be formatively assessed during the course by means of one or more set assignments. These do not count towards the end of year results, but will provide students with developmental feedback, both written and oral.

SUMMATIVE

Assessment will be in one form:

AE:	Assessment Activity	Weighting (%)	Online submission	Duration	Length
1	Examination	100%	N/A	1.5 hours	N/A

The examination will be assessed in accordance with the assessment aims set out in the Programme Specification.

FEEDBACK

Students will receive formal feedback in a variety of ways: written (including via email correspondence); oral (within one-to-one tutorials or on an *ad hoc* basis) and indirectly through discussion. Student's will also attend Collections, y in which they will receive constructive and developmental feedback on their performance.

Feedback on examinations is provided through generic internal examiners' reports and are made available to the student on the VLE.

INDICATIVE READING

Note: Comprehensive and current reading lists for courses are produced annually in the Course Syllabus or other documentation provided to students; the indicative reading list provided below is used as part of the approval/modification process only.

BOOKS

Bergmann, M., J. Moor and J. Nelson (2014) *The Logic Book*. 6th edition, New York: McGraw Hill.

Halbach, V. (2010) *The Logic Manual*. Oxford: Oxford University Press.

Hodges, W. (2001) *Logic: An Introduction to Elementary Logic*, 2nd edition, London: Penguin Books.

Papineau, D. (2012) *Philosophical Devices*. Oxford: Oxford University Press.

INDICATIVE TOPICS

- Informal Notions of Validity

- The Syntax and Semantics of Propositional Logic
 - The Syntax and Semantics of Predicate Logic
 - Sets and Relations
 - Identity
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Title: NCHPH752 Formal Logic Course Descriptor Approved by: Academic Board Location: Academic Handbook/Programme specifications and Handbooks/ Postgraduate Programme Specifications/MA Philosophy & AI Programme Specification/Philosophy Course Descriptors					
Version number	Date approved	Date published	Owner	Proposed next review date	Modification (As per AQF4) & category number
2.0	April 2022	April 2022	Brian Ball	April 2025	Category 3: Changes to Course Learning Outcomes
1.0	June 2020	June 2020	Brian Ball	April 2025	