

UNIVERSITY OF MADRAS
M.A. DEGREE PROGRAMME IN PHILOSOPHY
SYLLABUS WITH EFFECT FROM 2023-2024

Subject Code	Subject Name	Category	L	T	P	S	Credits	Inst. Hours	Marks		
									CIA	External	Total
407C2B	PHILOSOPHY OF SCIENCE	Core - V	Y	-	-	-	5	6	25	75	100
Learning Objectives											
1	To distinguish between science and common sense										
2	To make the students understand what makes something a science										
3	To know how does scientific reasoning works										
4	To explain how scientific theories change over time										
5	To enable the student to see how 'objective' science is.										
UNIT	Details										
1	Nature and Function of Philosophy of Science – Science and Common sense.										
2	Scientific Theories Hypothesis - Laws – Principles and Theories in Science – Thomas Kuhn's Paradigm shift – Karl Popper's Falsification theory.										
3	Scientific Explanations Deductive Pattern of Scientific Explanation – Four types of Scientific Explanation – Requirements of Scientific Explanations.										
4	Reductionism in Biology – Causality and Indeterminism in Physics – Alternate Descriptions of Physical State.										
5	Methodological problems of Social Science Controlled Inquiry – Subjective Nature of Social Subject Matter – Cultural relativity and Social Laws – Value-oriented bias of Social Inquiry.										
Course Outcomes											
CO	On completion of this course, students will										
1	The students will be familiar with several key issues in the Philosophy of Science										
2	Students understand what makes something a science										
3	Understands how scientific theories change over time										
4	Students feels comfortable to discuss complex ideas										
5	Able to analyze and construct philosophical arguments										
Text Book											
1	Peter Caws, <u>Philosophy of Science</u>										
2	Earnest Nagel, <u>Structure of Science</u>										
3	R. Harre, <u>Philosophy of Science</u>										
4	Thomas Kuhn, <u>The Structure of Scientific Revolution</u>										
5	Karl Popper, <u>The Logic of Scientific Discovery</u>										

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Reference Books

1.	Geoffrey Gorham, <u>Philosophy of Science (Audiobook)</u>
2.	Samir Okasha, <u>Philosophy of Science</u>
3.	James Ladyman, <u>Understanding Philosophy of Science</u>
4.	Peter Lipton, <u>Inference to the Best Explanation</u>
5.	Philip Kitcher, <u>The Advancement of Science</u>

Web Resources

1.	https://libguides.northwestern.edu/c.php?g=114753&p=748898
2.	https://library.uhv.edu/philosophy/websites

Mapping with Programme Outcomes:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO 1	1	1	1	1	1	1	1	1	2	1
CO 2	2	2	2	2	2	2	2	2	2	2
CO 3	3	3	3	3	3	3	3	3	3	2
CO 4	2	3	3	3	3	3	3	3	3	2
CO 5	2	3	3	3	3	3	3	3	3	2

Strong (3) Medium (2) Low (1)

Mapping with Programme Specific Outcomes:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	PO9	PO10
CO 1	1	1	1	1	1	1	1	1	1	1
CO 2	2	2	2	2	2	2	2	2	2	2
CO 3	3	3	3	3	3	3	3	3	3	3
CO 4	3	3	3	3	3	3	3	3	3	3
CO 5	3	3	3	3	3	3	3	3	3	3
Weightage	12	12	12	12	12	12	12	12	12	12
Weighted percentage of course contribution to POS	5-0	5-0	5-0	5-0	5-0	5-0	5-0	5-0	5-0	5-0

Strong (3) Medium (2) Low (1)