## KNOWLEDGE IN SCIENCE AND PHILOSOPHY

#### Overview

In this course we will examine the core questions of epistemology: What is knowledge? What, if anything, do we know? How do we know it? We will start by examining the philosophical and contextual background of these questions (skepticism) and four important approaches to answering them (foundationalism, coherentism, contextualism and reliabilism). In the second part of the course, we will focus on scientific knowledge. Topics will include: how do scientists acquire knowledge? Can we compare knowledge acquired from different methods? What counts as scientific evidence? Can scientific knowledge be objective? Should we value objectivity?

#### **Information & Policies**

#### I. Seminars

- Seminars will be held once a week, on Thursdays from 14.15 to 15.45.
- The first class is on November 5<sup>th</sup>.
- All seminars will be held on Zoom
- The Zoom link will be open from 14pm
- The seminars will start with 20-30 mins lecture, followed by discussion. Students are required to participate in the discussion.

#### II. Attendance

- Students are required to attend all seminars.
- Please be on time! Link will be open 15 mins before the start of the seminar

### III. Reading

- The syllabus has 'required' and 'recommended' readings.
- Students are *required* to read the required readings *before* the seminar
- Discussion will be based on the readings, so if you don't do the reading you won't have anything to contribute!
- You do not have to read the recommended readings, but it is a good idea to do so, especially if you choose that topic for your final essay.
- Many of the readings are from
  - o Michael Williams (2001) Problems of Knowledge: A critical introduction to Epistemology
- You can purchase the books if you wish, but all readings will be posted on the course website.

### IV. Participation

- Attending the seminar on zoom is required.
- Active participation is also required. This means participating in the discussion.

# V. Short Assignments

- The course has two types of short assignments
  - Study questions: these are questions to help structure your reading. Write a short paragraph or two answering the question after you have completed a reading. Have your paragraph near you so that you can refer to it during discussion. The study questions will be posted each week on Lernraum.
  - **Short papers:** These are 3 short papers (1-2 pages), answering a particular question. It is especially important to complete them if you are going to take the exam, so that you receive feedback before you embark on the longer essay.

#### VI. Exam

- The exam will take the form of a longer essay (6000-8000 words)
- Topic. Students can either pick one of the set topics or write about a topic of their choosing. If you choose the second option, you must have the question and title approved by me!
- The provisional deadline for the exam is March 21st

# VII. Office Hours

• By appointment over zoom. Please email me if you would like to meet.

## **Syllabus**

Date	Part	Topic	Readings
5/11	Introduction	What is Epistemology?	Required:  1. Steup & Neta – <i>Epistemology</i> (Stanford Encyclopedia of Philosophy)
12/11		Skepticism	Required: 1. Descartes – Meditations (excerpts) 2. Moore – Proof of an External World  Recommended: MW chs 5, 6
19/11	Part 1. Knowledge in Philosophy	The Gettier Problem	Required 1. Gettier – Is Justified True Belief Knowledge? 2. Clark – Knowledge and Grounds: A comment on Mr. Gettier's Paper  Recommended: 1. Zagzebski – The Inescapability of Gettier Problems 2. MW chs 3, 4
26/11		Foundationalism	Required: 1. Chisholm "The Myth of the Given"  Recommended:  MW chs 7, 8, 9

3/12			Required:
		• Coherentism	<ol> <li>Donald Davidson – A Coherence         Theory of Truth and Knowledge</li> <li>Recommended:         <ul> <li>MW chs 10, 11, 12</li> </ul> </li> </ol>
10/12		Contextualism	Required: 1. MW chs 14  Recommended:  • MW chs 15, 16
16/12		• Reliabilism	Required: 1. Alvin Goldman - What is Justified True Belief 2. Feldman & Conee - The Generality Problem for Reliabilism"  Recommended: 1. Bonjour - Externalist Theories of Empirical Knowledge 2. J. D. Trout & Michael Bishop - The Pathologies of Standard Analytic Epistemology
23/12- 3/01		Winter Break	
7/1		Objectivity	Required: 1. Longino – Values and Objectivity
14/1		Feminist approaches to Scientific Knowledge & Objectivity	Required:  2. Harding – Rethinking Standpoint Epistemology  Longino & Lennon – Feminist Epistemology as a Local Epistemology
23/1	Part 2. Knowledge	Data & Evidence	Required:  1. James Woodward – Data, Phenomena and Reliability
28/1	In Science	Models vs Experiments	Required:  1. Morgan – Experiments Versus Models: New Phenomena, Inference and Surprise.  2. Parker – Does Matter really Matter?
4/2		Internal and External Validity	Required: 1. Guala – Experimental Localism and External Validity
12/2	Review	Writing Papers in     Philosophy	N/A
12/2	Review		N/A
	Part 2. Knowledge in Science	Models vs Experiments	Phenomena and Reliability  Required:  1. Morgan – Experiments Versus Models: New Phenomena, Inferen and Surprise.  2. Parker – Does Matter really Matte