SCHOOL OF DIVINITY, HISTORY AND PHILOSOPHY

ACADEMIC SESSION 2015-2016

PH2033 SCIENCE AND PHILOSOPHY 2

15 CREDITS- 11 WEEKS

PLEASE NOTE CAREFULLY:

The full set of school regulations and procedures is contained in the Undergraduate Student Handbook which is available online at your MyAberdeen Organisation page. Students are expected to familiarise themselves not only with the contents of this leaflet but also with the contents of the Handbook. Therefore, ignorance of the contents of the Handbook will not excuse the breach of any School regulation or procedure.

You must familiarise yourself with this important information at the earliest opportunity.

COURSE CO-ORDINATOR/COURSE TEAM
Ulrich Stegmann u.stegmann@abdn.ac.uk
Office: Old Brewery, Room OBG13
Office hours: Tuesday 12 – 1 pm

Discipline Administration:
Miss Lisa Roberts
50-52 College Bounds
Room CB001
01224 273986
philosophy@abdn.ac.uk
TIMETABLE

Lectures (weeks 1-11; revision session week 12)
Tuesday 11 am -12 pm, King’s College, KCG 8

Tutorials (weeks 2, 4, 6, 8, 10) please see MyTimetable
Students can view their university timetable at
http://www.abdn.ac.uk/infohub/study/timetables-550.php

COURSE DESCRIPTION

This course introduces students to selected topics in general philosophy of science and in the philosophy of the special sciences. Here are some of the questions we will consider: In what sense is science reductionist? Are scientific experiments only employed in order to test hypotheses or also to explore phenomena? What are the applications of philosophy of science for understanding health and disease? Among the special sciences, we will explore topics in chemistry (natural kinds), the life sciences (biological functions), and psychology (the mind/brain as a computer). There are no pre-requisites for this course, and students from both the sciences and humanities are welcome to attend.

INTENDED AIMS

To introduce students to the central topics in philosophy of science
To be able to locate and utilise relevant secondary material
To develop skills of reasoning and debating

LEARNING OUTCOMES

To acquire knowledge of philosophy of science
To critically engage with central texts, debates and issues in philosophy of science
To be able to articulate one's ideas clearly and systematically in written form and discussion
SCHEDULE OF LECTURE AND TUTORIALS

Week 1
Lecture 1: The Scientific Method

Week 2
Lecture 2: Reductionism
Tutorial 1: The Scientific Method

Week 3
Lecture 3: Natural kinds

Week 4
Lecture 4: Special Sciences I: Biological Functions
Tutorial 2: Natural kinds

Week 5
Lecture 5: Special Sciences II: The Computational Theory of Mind

Week 6
Lecture 6: Experiments I: Testing Hypotheses
Tutorial 3: The Computational Theory of Mind

Week 7
Lecture 7: Experiments II: Exploring Phenomena

Week 8
Lecture 8: Special Sciences III: Animal Minds
Tutorial 4: Experimentation

Week 9
Lecture 9: Applied Philosophy of Science: Health & Disease I

Week 10
Lecture 10: Applied Philosophy of Science: Health & Disease II
Tutorial 5: Health & Disease
Week 11
Lecture 11: Applied Philosophy of Science: Evidence-based medicine

READING LIST FOR TUTORIALS
* compulsory readings

Week 2
Tutorial 1: The Scientific Method

Week 4
Tutorial 2: Natural Kinds and Chemistry
* Robin Hendry (2006). Elements, Compounds and Other Chemical Kinds, Philosophy of Science, 73: 864–875. All except Section 2 and bottom paragraph on p. 827 [defends natural kinds in chemistry]


**Week 6**

**Tutorial 3: The Computational Theory of Mind**


Jerry Fodor 1980. Methodological solipsism considered as a research strategy in cognitive psychology. In: *Behavioral and Brain Sciences*, 3: 63-72 [concise presentation of computationalism by its main proponent]


**Week 8**

**Tutorial 4: Experimentation**


Week 10

**Tutorial 5: Health and Disease**


* Wakefield, J. C. 1992 The Concept of Mental Disorder; on the boundary between biological facts and social values; *American Psychologist*. 6(3): 373–388 [pp. 381-6] [functional account]


Ereshefsky, M. 2009 Defining ‘Health’ and ‘Disease’. Studies in the history and philosophy of biological and biomedical sciences. 40(3): 221-7 [overview and criticism of definitional approaches]

NB: Readings for lecture topics that are NOT covered in tutorials will be provided separately.

ASSESSMENT
First Attempt: 2,500 word Essay (45%), Tutorial Participation (10%) and a 2 hr written Exam (45%)  
Resit- One 2500 word essay (100%)

Click to view the University Level Descriptors (ANNEX A).
Click to view the University Assessment Scale Band Descriptors (ANNEX B).

PLEASE NOTE: In order to pass a course on the first attempt, a student must attain a Common Grading Scale (CGS) mark of at least E3 on each element of course assessment. Failure to do so will result in a grade of no greater than CGS E1 for the course as a whole.

ESSAYS
Word count is plus/minus 10 %, including footnotes but excluding bibliography. You can choose between two essay topics:
   1. Is water a natural kind?  
   OR  
   2. ‘The computational theory gives a good account of the mind’. Discuss.

ASSESSMENT DEADLINES  
Essay deadline: Tuesday, 24 November 2015 (week 11)
SUBMISSION ARRANGEMENTS
Submit one paper copy with a completed essay cover sheet to the drop boxes in CB008 in 50-52 College Bounds and one electronic copy to Turnitin via MyAberdeen. Both copies to be submitted by 3.00pm on the due date. Please note: Failure to submit both an electronic copy to TurnitinUK and an identical paper copy, with the digital receipt attached, will result in a deduction of marks. Failure to submit to TurnitinUK will result in a zero mark.

EXAMINATION
The exam will be two hours. General exam guidance will be given in the Student Handbook. A past exam paper is available for this course via the Student Portal.

Past exam papers can be viewed at http://www.abdn.ac.uk/library/learning-and-teaching/for-students/exam-papers/.