

Interdisciplinary (ID) Modules

ID1003 Great Ideas 1				
SCOTCAT Credits:	20	SCQF Level 7	Semester	1
Academic year:	2019/0			
Planned timetable:	1.00 pm Mon, 1.00 pm Tue, 1.00 pm Thu			
The aim of this module is to trace some of the major intellectual and societal threads in the development of modern civilisation: the 'canon' of modern thought. The module is in three sections. Part 1 is 'Arguments and Facts' and explores the fundamentals of logic, analysis and reasoning. Part 2, 'Rhetoric, Debate and Understanding' will explore how argument can be used to cajole, convert, persuade and entertain and emphasise the importance in understanding another person's position. Part 3, 'Applying Analysis' takes the learning and skills of the previous sections and applies them to some of the great texts and artworks of western civilisation.				
Learning and teaching methods of delivery:	Weekly contact: 2 to 3 lectures and 1 tutorial.			
	Scheduled learning: 40 hours		Guided independent study: 160 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-assessment pattern:	3-hour Written Examination (4 questions) = 100%			
Module coordinator:	Dr C G M Paxton			
Module teaching staff:	Team taught			

ID1004 Great Ideas 2				
SCOTCAT Credits:	20	SCQF Level 7	Semester	2
Academic year:	2019/0			
Planned timetable:	1.00 pm Mon, 1.00 pm Tue, 1.00 pm Fri			
Students will be introduced to influential thinkers, theories and texts across four main themes: the nature of reality; matter and the cosmos and their representations in the Arts; the idea of rights; and the principle of evolution as applied within and beyond the biological sciences. Students will encounter thinkers from Plato to Einstein, via Newton, Kant, Wollstonecraft and Darwin. They will develop an appreciation of the wider importance of figures such as these to a range of human intellectual endeavour across disciplinary boundaries. Use is made of original source material where possible, and lectures are supplemented by facilitated discussion sessions. This module complements Great Ideas 1, but may be studied independently.				
Learning and teaching methods of delivery:	Weekly contact: 3 lectures and 1 tutorial.			
	Scheduled learning: 42 hours		Guided independent study: 158 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-assessment pattern:	3-hour Written Examination = 100%			
Module coordinator:	Dr S F Mansell			

Interdisciplinary – 1000 & 2000 Level -2019/0 – August 2019

ID1006 Astrobiology: The Search for Life in the Universe			
SCOTCAT Credits:	20	SCQF Level 7	Semester 2
Academic year:	2019/0		
Planned timetable:	1.00 pm		
<p>This module aims to lead students through the scientific quest for the origin of life on Earth and the prospect for finding life on other planets, both in our solar system and on habitable worlds elsewhere in the Galaxy. The course will cover diverse topics in biology, geology, astronomy and chemistry, which comprise the field of astrobiology. We will also discuss the societal implication of detecting life outside Earth. The course will start by studying the origins and evolution of life on Earth and will use this as a framework for how to search for life in our Solar System and beyond. Due to the wide range of scientific topics covered, the course will be suitable for non-science majors as well as those in the sciences. A key component of the course will be to examine science as a way of knowing by looking at the scientific process, how scientific theories are developed and refuted, and discuss the burden of proof for extraordinary claims.</p>			
Learning and teaching methods of delivery:	Weekly contact: Lectures (2 hours x 11 weeks), Practical sessions (1 hour x 11 weeks)		
	Scheduled learning: 42 hours	Guided independent study: 158 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%		
Re-assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%		
Module coordinator:	Dr M Claire		
Module teaching staff:	Dr C R Cousins, Dr M Claire, Dr E Stueken and guest lecturers		

ID2003 Science Methods			
SCOTCAT Credits:	10	SCQF Level 8	Semester 1
Academic year:	2019/0		
Planned timetable:	1.00 pm Mon, 1.00 pm Tue, 4.00 pm Thu		
<p>This module provides an overview of the rationale, methods, history and philosophy of science. We explore the different definitions of science, the distinction between science and pseudo-science, the design of experiments, critical thinking, errors in reasoning, methods of making inferences and generalisations, the role of personal experience and anecdotes in science, the process of scientific publication and the role of anomalies in science. The module is collaboratively taught by staff from a number of schools in the university providing a useful methodological background for all science students.</p>			
Anti-requisite(s)	You cannot take this module if you take ID2005		
Learning and teaching methods of delivery:	Weekly contact: 2 lectures and 1 practical class.		
	Scheduled learning: 32 hours	Guided independent study: 68 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 1.5-hour Written Examination = 50%, Coursework = 50%		
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Dr C G M Paxton		
Module teaching staff:	Team taught		

ID2005 Scientific Thinking			
SCOTCAT Credits:	15	SCQF Level 8	Semester
Academic year:	2019/0		
Planned timetable:	Lectures: 1.00 pm Mon, Tue, Wed Tutorials: 4.00 pm - 6.00 pm Thu		
This module provides an overview of the rationale, methods, history and philosophy of science and is a more detailed, 15-credit version of ID2003. We explore the different definitions of science, the distinction between science and non-science, the design of experiments, errors in reasoning, critical thinking, personal experience and science, the grammar of graphics, the process of science, peer review, research reproducibility, data cataloguing, the treatment of anomalies and outliers, and ethics. The module is collaboratively taught by staff from a number of Schools of the University providing a useful methodological background for all science students.			
Anti-requisite(s)	You cannot take this module if you take ID2003		
Learning and teaching methods of delivery:	Weekly contact: 3 x 1-hour lectures (x 11 weeks), 1-hour tutorials (x 8 weeks), 1-hour seminar (x 1 week) 2-hour practical (x 1 week), 6 hours film/video viewing in total.		
	Scheduled learning: 50 hours	Guided independent study: 100 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 1.75-hour Written Examination = 50%, Coursework = 50%		
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Dr C G M Paxton		
Module teaching staff:	Team taught		