

WESTERN UNIVERSITY
DEPARTMENT OF PHILOSOPHY
Undergraduate Course Outline 2022-23

PHILOSOP 1030A
Understanding Science

Fall Term MW 9:30–10:30 Somerville House 3345	Instructor: Wayne Myrvold Office: Stevenson Hall 4143 Office hours: MW 13:30–14:30 wmyrvold@uwo.ca
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PREREQUISITES

None

DESCRIPTION

This non-essay course is aimed both at non-science majors who want to gain an understanding of the place of science in our world and how it relates to other parts of our culture, and also at science students who want to gain an appreciation of the place of their discipline in the wider culture.

Science plays a central role in our lives. It is the source of new technological developments, and of information about safety and risks that are relevant to our decisions as individuals and as a society. Yet many people find science disquieting. There is a feeling that science destroys the wonder of nature. Moreover, many people mistrust what scientists tell them.

In this course we will dive into an investigation of the nature of science and its place in modern culture. Among the questions to be addressed are: What distinguishes science from non-science? How do scientists come to the conclusions that they do? Should we place our trust in science? How can we, as non-scientists, tell whether we should rely on what news reports tell us about the results of scientific studies? What is the role and value of science in a democratic society?

TEXTS

Assigned readings, available on course OWL site.

OBJECTIVES

Students will learn the basics of scientific methodology and experimental design. They will gain an appreciation for the place of science within our culture. In addition, they will become familiar with the basics of some contemporary scientific controversies. Most importantly, students will develop skills needed to distinguish scientific claims that are well-supported by evidence from those that are not.

REQUIREMENTS

Attendance and active participation in class discussion; attendance and active participation in tutorials; three written assignments; midterm & final tests.

TUTORIALS

Students must register for one of the tutorial sessions, held weekly.

METHOD OF EVALUATION

Tutorial participation:	5%
Written Assignments:	
# 1 Internet research exercise	
a) Part 1, due Sept. 24	5%
b) Part 2, due Oct. 12	10%
# 2 Evaluation of media article (due Oct. 21)	15%
# 3 Designing and carrying out a simple experiment	
a) Experimental proposal due Nov. 9.	
b) Experimental report (due Nov. 30)	15%
Tests:	
Midterm (Oct. 30)	25%
Final (TBA, Dec. exam period)	25%

AUDIT

Students wishing to audit the course should consult with the instructor prior to or during the first week of classes.

DEPARTMENT OF PHILOSOPHY POLICIES

The Department of Philosophy policies that govern the conduct, standards, and expectations for student participation in Philosophy courses are available in the Undergraduate section of the Department of Philosophy website <http://uwo.ca/philosophy/undergraduate/policies.html>.

It is your responsibility to understand the policies set out by the Senate and the Department of Philosophy, and thus ignorance of these policies cannot be used as grounds of appeal.

ACCOMMODATION

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department. Documentation shall be submitted, as soon as possible, to the Office of the Dean of the student's Faculty of registration, together with a request for relief specifying the nature of the accommodation being requested.

The UWO Policy on Accommodation for Medical Illness and further information regarding this policy can be found at

http://uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

EVALUATION OF ACADEMIC PERFORMANCE

At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive an assessment of work accounting for at least 15% of their final grade. For 3000- or 4000-level courses in which such a graded assessment is impracticable, the instructor(s) must obtain an exemption from this policy from the Dean and this exemption must be noted on the

corresponding course syllabus. In rare instances and at the Dean's discretion, other courses could receive a similar exemption, which also must be noted in the course syllabus.

COURSE ASSIGNMENT

The last day of scheduled classes in any course will be the last day on which course assignments will be accepted for credit in a course. Instructors will be required to return assignments to students as promptly as possible with reasonable explanations of the instructor's assessment of the assignment.

ACADEMIC OFFENCES

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

PLAGIARISM CHECKING

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com <http://www.turnitin.com>.

SUPPORT SERVICES

Registrarial Services <http://www.registrar.uwo.ca>

Student Support Services <https://student.uwo.ca/psp/heprdweb/?cmd=login>

Services provided by the USC <http://westernusc.ca/services/>

Student Development Centre <http://www.sdc.uwo.ca/>

Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help. Immediate help in the event of a crisis can be had by phoning 519.661.3030 (during class hours) or 519.433.2023 after class hours and on weekends.