

**THE UNIVERSITY OF WESTERN ONTARIO**  
**DEPARTMENT OF PHILOSOPHY**  
**Undergraduate Course Outline 2016-17**

**Philosophy 2030G: Philosophy of Science**

**Winter Term 2017**  
**T 10:30-12:30, Th 10:30-11:30**  
**Classroom: TC 343**

**Instructor: Kathleen Okruhlik**  
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**okruhlik@uwo.ca**

*This course outline is tentative and subject to change.*

**OVERVIEW**

This course presupposes no prior knowledge of philosophy.

What makes an area of research count as “scientific”? Is it possible to establish any sort of principled distinction between science and pseudo-science? Why do most philosophers consider “creation science” an oxymoron while simultaneously treating highly speculative theories in cosmology as worthy of serious pursuit? Is this just a prejudice, or are there good reasons for the differing attitudes?

We shall begin by examining Logical Empiricism, a view that dominated philosophy of science for much of the 20<sup>th</sup> century, and then move on to the Thomas Kuhn’s *Structure of Scientific Revolutions*, which made it clear that logical analysis of science is not enough. Any decent philosophy of science will have to take into account the history of science. In the final part of the course, we will look at more recent developments that have caused many philosophers of science to concede that not only is the history of science relevant to our philosophical accounts, but so also is the social context within which science is pursued.

**OBJECTIVES**

In addition to becoming familiar with basic issues and positions in philosophy of science, students will be expected to develop their ability to:

- Read carefully and with attention to context.
- Pursue research using both traditional and web-based resources.
- Represent opposing arguments fairly.
- Communicate these effectively.
- Argue respectfully with one another.
- Critically assess complex arguments (both orally and in writing).
- Work collaboratively on class presentations.
- Develop their own positions and a better understanding of sometimes-controversial issues.

## **TEXTS**

*Theory and Reality: An Introduction to the Philosophy of Science* by Peter Godfrey Smith. University of Chicago Press, 2003.

*The Structure of Scientific Revolutions* by Thomas Kuhn, 4<sup>th</sup> edition. University of Chicago Press, 2012.

Both books are available in paperback through the Western Book Store. Additional material will be made available through Owl.

## **REQUIREMENTS**

There will be three quizzes administered during regular classroom hours. Each will be worth 15% of the final mark. A 2,000-word essay will be due on the last day of class and will count for 40% of the final mark. (No extensions are permitted.) Attendance and participation will count for 15%.

Note: 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> ).

## **AUDIT**

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

The **Department of Philosophy Policies** which govern the conduct, standards, and expectations for student participation in Philosophy courses is available in the Undergraduate section of the Department of Philosophy website at <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.

## **SUPPORT SERVICES**

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.