



**School of Arts & Science**  
**HUMANITIES DEPARTMENT**  
**PHIL 215 Philosophy of Science**  
**Monday and Wednesday 2:30-5:20**  
**Young 219**  
**Spring 2014**

## COURSE OUTLINE

The course description is online @ <http://camosun.ca/learn/calendar/current/web/phil.html>

W Please note: the College electronically stores this outline for five (5) years only.  
 It is **strongly recommended** you keep a copy of this outline with your academic records.  
 You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

### 1. Instructor Information

(a)	Instructor:	Craig Derksen		
(b)	Office Hours:	Monday and Tuesday 1:30-2:20		
(c)	Location:	Young 320		
(d)	Phone:	370-3390	(d)	Phone:
(e)	Email:	derksenc@camosun.bc.ca		
(f)	Website:			

### 2. Intended Learning Outcomes

*(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)*

Upon completion of this course the student will be able to:

1. Critically evaluate the veracity of scientific claims.
2. Articulate the nature of a problem in philosophy of science.
3. Explain the plurality of both scientific theories and philosophical approaches to science.
4. Differentiate among a variety of contemporary ethical issues in science.

### 3. Required Materials

All required readings are available online

### 4. Course Content and Schedule

May 5

General Introduction/Philosophy/Science/This Class

<http://www.mentalfloss.com/article/55272/15-inaccuracies-found-common-science-illustrations>

<http://xkcd.com/977/>

May 7

Logical Positivism

<http://plato.stanford.edu/entries/logical-empiricism/>

May 12

Popper and Falsificationism

<http://plato.stanford.edu/entries/popper/>

May 14

Kuhn and Paradigms

<http://plato.stanford.edu/entries/thomas-kuhn/>

May 19

Lakatos and Research Programs

<http://plato.stanford.edu/entries/rationality-historicist/>

May 21

Feyerabend and Scientific Anarchy

<http://plato.stanford.edu/entries/feyerabend/>

May 26

Van Fraassen and Constructive Empiricism

<http://plato.stanford.edu/entries/constructive-empiricism/>

May 28  
 Bayesianism  
<http://plato.stanford.edu/entries/epistemology-bayesian/>  
 June 2  
 Social Science  
<http://www.iep.utm.edu/soc-sci/>  
 June 4  
 Non-Scientists  
<http://www.compoundchem.com/2014/04/02/a-rough-guide-to-spotting-bad-science/>  
<http://io9.com/how-bayes-rule-can-make-you-a-better-thinker-471233405>  
<http://edge.org/>  
<http://youarenotsmart.com/>  
 June 9  
 Gender  
<http://plato.stanford.edu/entries/feminist-science/>  
 June 11  
 Signal and Noise  
[http://www.salon.com/2014/04/14/does\\_even\\_nate\\_silver\\_have\\_limits\\_what\\_big\\_data\\_can\\_and\\_cant\\_tell\\_us/](http://www.salon.com/2014/04/14/does_even_nate_silver_have_limits_what_big_data_can_and_cant_tell_us/)  
 June 16  
 Image and Logic  
[http://muse.jhu.edu/login?auth=0&type=summary&url=/journals/perspectives\\_on\\_science/v007/7.2baird01.html](http://muse.jhu.edu/login?auth=0&type=summary&url=/journals/perspectives_on_science/v007/7.2baird01.html)  
 June 18  
 Bringing it together  
 June 19  
 Flexible

### 5. Basis of Student Assessment (Weighting)

3 papers worth 30%, 30%, and 40% each due May 22, June 5, and June 20.

### 6. Grading System

*(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)*

#### Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

#### Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at [camosun.ca](http://camosun.ca) for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. <i>(For these courses a final grade will be assigned to either the 3<sup>rd</sup> course attempt or at the point of course completion.)</i>

<b>CW</b>	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.
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**7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course**

**LEARNING SUPPORT AND SERVICES FOR STUDENTS**

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services, or the College web site at [camosun.ca](http://camosun.ca).

**STUDENT CONDUCT POLICY**

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.