**DPHY 2690 Science and Ethics**

**Room 312, Tuesdays, 5:30-8:30 PM**

**Instructor: Dr. Hugh Hunter**

**Meeting Outside of Class: By Appointment**

**Email:** [h.hunteronline@gmail.com](mailto:h.hunteronline@gmail.com)

**Required Texts**

1. Amazon E-Book: [*Introductory Readings in the Philosophy of Science*](http://www.amazon.ca/Introductory-Readings-Philosophy-Science-David/dp/B002GYWQF0/ref=sr_1_1_twi_2?ie=UTF8&qid=1420512733&sr=8-1&keywords=philosophy+of+science+klemke)Ed.s E. D. Klemke, Robert Hollinger, David Wyss Rudge and A. David Kline [T]

2. Readings found online. Click the link in the syllabus to go to them. [O]

**Course Website**

[www.jhughunter.com](http://www.jhughunter.com)

**Course Work and Grading**

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| **Assignment** | **Due** | **Value** |
| Short Essay 1 | By email, 11:59 PM, Jan 30 | 20% |
| Mid-Term Examination | In class, Feb 13, 5:30 | 20% |
| Short Essay 2 | By email, 11:59 PM, Apr 3 | 20% |
| Final Examination | April 24, 5:30 PM | 30% |
| Participation | Ongoing | 10% |
| Optional Short Essay 3 | By email, 11:59 PM, Apr 17 | Replaces the Short Essay 1, 2 or Mid-Term, whichever is lowest grade. |

1. Late work will lose one letter grade increment per day. For example, a piece of work one day late that would ordinarily receive a B would receive a B-. Missing an exam will result in a zero.

2. I take plagiarism seriously, and so does the [Dominican University College](http://www.dominicanu.ca/sites/default/files/pdfs/Academic_Integrity_Policy-2014-04-15.pdf). Please familiarize yourself with this policy to ensure that you do not plagiarize by mistake.

3. If you require special assistance, or if you would like to ask for an extension, please speak to me before or after class.

4. Short Essay 3 is optional. If you wish to submit it, you may, and I will count it instead of your lowest grade on the Mid-Term or the other two essays. There will be no other extra credit assignments for this course.

**Course Schedule**

| **Date** | **Topic** | **Due** | **Reading** |
| --- | --- | --- | --- |
| Jan 9 | The Scientific Revolution |  | None |
| Jan 16 | Induction |  | Principia Mathematica, Sec 3, Scholium ([complete work](https://archive.org/details/newtonspmathema00newtrich)), Sir Isaac Newton [O]  Enquiry Concerning Human Understanding, Sec 4 ([complete work](http://www.davidhume.org/texts/ehu.html)), David Hume [O]  (The exact texts you need are hosted separately on the main page of the course website) |
| Jan 23 | What is Science? Falsificationism |  | “What is Science?”, John Ziman [T]  “Conjectures and Refutations”, Sir Karl Popper [T] |
| Jan 30 | What is Science? Paradigms | Essay 1 Due | “Objectivity, Value Judgment, and Theory Choice”, Thomas Kuhn [T]  [“On Simple Theories of a Complex World”](http://sveinbjorn.org/simple_theories_of_a_complex_world), W.V.O. Quine [O] |
| Feb 6 | What is Science?  Feyerabend |  | “How to Defend Society Against Science”, Paul Feyerabend [T]  Midterm Review |
| Feb 13 | 5:30-7:00 Mid Term Exam | | |
| Feb 20 | Reading Week | | |
| Feb 27 | What is Science About? |  | “The Ontological Status of Theoretical Entities”, Grover Maxwell [T]  [“Constructive Empiricism Now”, Baas Van Fraassen](https://www.princeton.edu/~fraassen/abstract/docs-publd/CE_Now.pdf) [O] |
| Mar 6 | Hard and Soft Sciences |  | “If Economics isn’t Science, What is it?”, Alexander Rosenberg [T]  [“Special Sciences (Or: The Disunity of Science as a Working Hypothesis)”, Jerry Fodor](http://fitelson.org/woodward/fodor.pdf) [O] |
| Mar 13 | Is Science Connected to Ethics? |  | [“Non-Overlapping Magisteria”, Stephen Jay Gould](http://www.stephenjaygould.org/library/gould_noma.html) [O]  “The Scientist qua Scientist Makes Value Judgments”, Richard Rudner [T] |
| Mar 20 | Science and Human Beings 1 |  | [“Moral Philosophy Meets Social Psychology”](https://www.princeton.edu/~harman/Papers/Virtue.html), Gilbert Harman [O]  Optional Extra Materials  [Milgram Obedience Experiments](https://www.youtube.com/watch?v=yr5cjyokVUs) [O]  [University of Toronto Ethics Research Guidelines: Participant Observation](http://www.research.utoronto.ca/wp-content/uploads/2012/10/Participant-Observation-Guidelines-2005.pdf) [O]  [University of Toronto Ethics Research Guidelines: Deception and Debriefing](http://www.research.utoronto.ca/wp-content/uploads/2012/10/Deception_and_Debriefing_Guidelines.pdf) [O] |
| Mar 27 | Science and Human Beings 2 |  | [“Ethical Issues in Human Enhancement”](http://www.nickbostrom.com/ethics/human-enhancement.pdf), Nick Bostrom & Rebecca Roache [O]  [“Ageless Bodies, Happy Souls: Biotechnology and the Pursuit of Perfection”](Ageless%20Bodies,%20Happy%20Souls), Leon Kass [O] |
| Apr 3 | The Status of Animals | Short Essay 2 Due | [“The Case for Animal Rights”](http://www.animal-rights-library.com/texts-m/regan03.htm), Tom Regan [O]  [“The Case for the Use of Animals in Biomedical Research”,](http://spot.colorado.edu/~heathwoo/phil1200,SP08/cohen.pdf) Carl Cohen [O]  Available in Contemporary Moral Issues: Diversity and Consensus, edited by Lawrence M. Hinman (Upper Saddle River: Pearson Prentice Hall, 2006)  [BJ 1031 .H55 C65 2006] |
| Apr 10 | Environmental Ethics |  | [“Thinking Like a Mountain”](http://www.eco-action.org/dt/thinking.html) Aldo Leopold [O]  [“The Shallow and the Deep, Long-Range [O]](https://iseethics.files.wordpress.com/2013/02/naess-arne-the-shallow-and-the-deep-long-range-ecology-movement.pdf)  [Ecology Movement: A Summary”](https://iseethics.files.wordpress.com/2013/02/naess-arne-the-shallow-and-the-deep-long-range-ecology-movement.pdf), Arne Naess [O]  [“Duties Concerning Islands”](https://iseethics.files.wordpress.com/2013/02/midgley-mary-duties-concerning-islands.pdf), Mary Migely [O]  [“Conservatism and the Environment”](http://www.rogerscruton.com/articles/281-conservatism-and-the-environment), Sir Roger Scruton [O] |
| Apr 17 | TBA/Review | Optional Short Essay 3 Due | TBD |
| Apr 24 | Final Exam | | |