

# Scientific Thought II

## Philosophy 318/History 366

Basic Information

Spring 2010

**Professor:** Patrick Maher, e-mail [patrick@maher1.net](mailto:patrick@maher1.net), office 219A Gregory Hall, office hours Monday 11–12 and Wednesday 3–4 or by appointment.

**Description:** This course is a selective survey of science and philosophy of science from the 18th century to now. The first third of the course will discuss views on how scientific theories are justified and on the nature of probability (Hume, Popper, Kuhn, Laplace, Keynes, Maher). The middle third of the course will discuss scientific theories from this period in chemistry, biology, and physics (Black, Darwin, Einstein). The final third of the course will discuss accounts of the nature of causation and scientific laws (Hume, Mill, Lange, Woodward, Carnap, Lewis). No prior knowledge is assumed; in particular, students need not have taken Scientific Thought I.

**Web site:** [patrick.maher1.net/318](http://patrick.maher1.net/318). Has everything you need, including this document. If you forget the URL, just Google “Patrick Maher”.

**Textbook:** None. Everything you need is on the web site.

**Quizzes:** There will be nine true-false quizzes done on Compass. Each quiz will cover the previous four lectures. See the web site for dates and details.

**Exams:** There will be three 50-minute exams done in class. Each exam will consist of a selection of questions from the lecture notes for the previous twelve lectures. See the web site for dates and details.

**Grading:** The quizzes together count for 25% of the grade and each exam counts for 25% of the grade. Grades will be posted on Compass. The grading scale is:

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
95–100	90–94	85–89	80–84	75–79	70–74	65–69	60–64	55–59	50–54	45–49	40–44	0–39

**Class attendance:** Isn’t required or graded but there is a correlation between attendance and grades. Some reasons to attend class: I often say more than I have put in the lecture notes, I explain what is wrong or missing from students’ answers to the questions, and you can ask about things you don’t understand.

**Information from the class schedule:** Classes are 1:00–1:50 MWF in 329 Gregory Hall.