GENERAL COURSE INFORMATION

Course Title: Phil 537 Philosophy of Science

Section Info: Schedule # 22382, MW 2:00-3:15, MCN-106 (Temporary classroom bldg., corner of College Ave and Linda Paseo St.)

Instructor: Thomas Weston **E-Mail:** tweston@mail.sdsu.edu
Web page: http://tomweston.net **Phone:** 619-594-6218
Office: AL-442 **Office Hrs:** TBA

SUBJECT OF COURSE:

This course is about the philosophy of natural science. Examples will be drawn mainly from physics and biology, but students are not expected to know this material in advance. We will study answers that have been given to some of the questions mentioned below, mainly by Anglo-American philosophy. This philosophical tradition is heavily influenced by empiricist epistemology, so many of the debates we will discuss are between pro- or anti-empiricist positions. The questions: what is a scientific theory, how is it structured, which kinds of tests are theories subject to, are theories ever known to be true or probably true and according to what conception of truth?

READING LIST:

Please purchase the following book: Boyd, Gasper, and Trout, *The Philosophy of Science*, MIT Press. You may have to get a used copy from Amazon or other online seller. You will also need to buy several packets of Xeroxed materials. These will be available later in the semester from Cal Copy, across College Ave. from campus, and will be posted on Blackboard.

COURSE REQUIREMENTS: (*all* must be completed for a passing grade)

1) Two one-hour midterm exams, essay form, count 20% each.
2) A paper of 2000-2500 words. Instructor will give suggested topics and detailed instructions, after the first exam is returned. First draft will be due late in the semester. Final draft is due at end of finals week. Counts 20%.
3) Comprehensive final examination, questions available in advance, essay form. Counts 35%.
4) Short quizzes on the assigned reading. Count 5%.

Please note: the paper is not optional, but is a requirement for this course. Regular attendance, reading of assignments on time, and participation in class discussion is expected. In addition to the printed text, the instructor will post Powerpoint slides for most lectures, as well as study questions, sample exam answers and revised due dates and assignment lists.

Tentative Assignments and Dates

Date	Classes	Subject	Pages
8/26/13	3	Boyd's introduction	3 - 21
9/4/13	2	Hempel, Empiricist Criterion of Significance	71 - 84
9/11/13	3	Kuhn, Scientific Revolutions	139 - 157
9/23/13	2	Quine, Natural Kinds	159 - 170
9/30/13	2	Putnam, Explanation and Reference	171 - 185
10/7/13	2	Van Frassen, To Save the Phenomena	187 - 194
10/14/13	3	Boyd, The Current Status of Scientific Realism	195 - 222
10/23/13	1	First Midterm	
10/28/13	1	Laudan, Confutation of Convergent Realism	223 - 246

10/30/13	2	Weston, Approximate Truth	article
11/4/13	1	Kitcher, Explanatory Unification	321 - 348
11/6/13	2	Boyd, Explanatory Power	349 - 378
11/13/13	2	Elliot, Modern Science & Materialism	packet
11/20/13	1	Engels, Approx. & Relative Truth	packet
11/20/13	2	Garfinkel, Reductionism	443 - 462
11/27/13	2	Wimsatt, Aggregation	packet
12/4/13	1	Mulkey on Darwin	packet
12/9/13	1	2nd Midterm	
12/11/13	1	Last class	
12/16/13	1	Final exam, 1:00 - 3:00	

Accommodation for Disabilities

The instructor will be happy to meet with any student who may need support services due to a disability. He will cooperate with DSS in providing authorized accommodations or support services for students.