

Syllabus. Scientific Revolutions 30.06. Fall 2012. Menser. 11-12:15 MW; 4428 Ingersoll.. Office hours: 3316 Boylan, morphospace@gmail.com; 951 5311 (leave messages at this number only).

GOALS OF THIS COURSE (which is to say, by the end of the course, you should be able to do the following): 1/ understand what knowledge is and how it is acquired using methods of different disciplines; 2/ to develop the ability to think critically and creatively, to reason logically, and to express one's thoughts orally and in writing with clarity and precision; 3) to consider the social, political and economic contexts and applications of scientific theory and practice

Requirements/Grading: attendance/participation (10%; 2 excused absences permitted; 5% for every one after that regardless of reason, out of 50% of 5%), quiz (10%); two 5 page papers (20% each); midterm (20%); final exam (20%); Grades are not curved but scaled. One unannounced extra credit assignment. NOTE: Philosophy requires discussion and debate and it sometimes gets heated, but remember to always treat other students with appropriate respect and never attack people personally. (Please refrain from texting during class.) Violations of the preceding impact on participation/attendance grade.

Attendance—one (excused) absence is permitted, each absence after that results in 5 point drop (regardless of reason).

Plagiarism Policy: The faculty and administration of Brooklyn College support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both. The complete text of the CUNY Academic Integrity Policy and the Brooklyn College procedure for implementing that policy can be found at this site: <http://www.brooklyn.cuny.edu/bc/policies>. If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member MUST report the violation.

DISABILITIES POLICY

In order to receive disability-related academic accommodations students must first be registered with the Center for Student Disability Services. Students who have a documented disability or suspect they may have a disability are invited to set up an appointment with the Director of the Center for Student Disability Services, Ms. Valerie Stewart-Lovell at 718-951-5538. If you have already registered with the Center for Student Disability Services please provide your professor with the course accommodation form and discuss your specific accommodation with him/her.

TEXTBOOK: you are to purchase a course packet at Far Better Copies at the corner of Campus Road and Hillel. All other readings are handouts that will be supplied during the term.

0. Scientific Explanation and Global Warming: methods, evidence, implications
intro to science and philosophy; global warming
-Bill Mckibben, "A New World" (from *Eaarth*)

PART ONE: Revolution One:

I. Darwin vs. Creationism

- William Paley, "Natural Theology"
- Charles Darwin, "Origin of Species"

II. Theories of Scientific Change and the Revolutionary Politics of Evolution

- Philip Kitcher, "Darwin's Achievement"

QUIZ

- Levins and Lewontin, "Evolution as Theory and Ideology"
- Thomas Kuhn, "On the Nature of Scientific Revolutions"

PAPER ONE due

PART TWO: Scientific Revolution or Revolutionary Science?

III. Coevolution, Ecology and The "Green" Revolution

- Murray Bookchin, "Ecology as Revolutionary Science"
- Robert P. Clark, "Life Systems and Globalization"
- Norman Borlaug, "The Green Revolution Revisited and the Road Ahead"

NOV 5: MIDTERM

IV. The Role of Science in "Technological Revolutions": Science, Food, and Capitalism

- Hugh Lacey, "Seeds and their Sociocultural Nexus"
- Tilman et al., "Agricultural sustainability and intensive production practices"

PAPER TWO due

- Carolyn Merchant, "The Realm of Social Relations: Production, Reproduction, and Gender in Environmental Transformations"

Dec 17: 10:30am-12:30pm: FINAL EXAM