

**GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF COMMERCE AND EDUCATION**

**Course Proposal
PH 2650
Introduction to the Philosophy of Science**

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Lecture/No pre-requisites

Calendar Description

This course offers an introduction to the central issues in contemporary philosophy of science. Topics may include theory evaluation, paradigm shifts and theory change, laws of nature, causation and explanation, the rationality of science and its social and historical setting.

Content Description

This course examines some of the traditional problems and topics in the philosophy of science. Topics and problems, such as, the demarcation problem, the problem of induction, reductionism, realism, instrumentalism, etc., are presented as they arise in the readings. The course is designed to present the materials needed for students to conduct their own research inquiries by applying the methods and principles learned to particular questions. So, for example, students may choose to research questions such as, Is medicine a science? Can subjectivity be an object of scientific study? Do super-strings exist? These research efforts will take the form of the term paper and are the central evaluative component of the course.

Texts

Arthur Zucker, *Introduction to the Philosophy of Science*, Prentice-Hall Inc., (Upper Saddle River, NJ, 1996) (required)
Course Packet of supplemental readings. (required)

Timeline

(A detailed syllabus will be distributed on the first day of classes.)

- \$ Week One: Introduction
- \$ Weeks Two & Three : Case Studies from the History of Science
- \$ Weeks Four-Six : Scientific Explanation
- \$ Weeks Seven-Nine : Confirmation
- \$ Weeks Ten & Eleven : The Status of Theories and Theoretical Entities
- \$ Weeks Twelve & Thirteen: The Value-Ladenness of Science

Evaluation

\$ 4 in-class quizzes.....	10%
\$ 1 short paper (5 double-spaced pages).....	15%
\$ 1 term paper (10 double-spaced pages).....	35%
\$ Midterm examination.....	20%
\$ Final, registrar scheduled, examination.....	20%

Evaluation Policies

Extensions of assignment and paper deadlines will be considered *only* in the case of significant extenuating circumstances. If such circumstances arise students requesting an extension will be required to show evidence that a significant amount of work on the assignment has been completed in advance of the day *before* the work is due. For example, if a student requests an extension on the day before an assignment is due, a complete, or very nearly complete, draft of the paper must be shown to the instructor at the time of the request.

Students in circumstances of extreme duress should notify the instructor as soon as possible if they anticipate difficulty in submitting their work on time.

Penalties for assignments submitted for credit late without prior permission from the instructor are at the discretion of the instructor and may accrue at as much as **25% for each day late**.

Quizzes that are missed due to absence will *not* be rescheduled. Deferred writing of a scheduled Midterm Exam is at the discretion of the instructor. Absences from a registrar-scheduled Final Exam fall under GPRC Examination Policy. It is the responsibility of the student to be informed about these policies prior to the final examination period. A description of the policy is available in the GPRC Calendar and in the Student Handbook.

WebCT

Students will have access to online threaded discussion of course materials. Topics for discussion will be suggested by the instructor but students are encouraged to initiate discussion based on individual interests. Discussion contents may be viewed by the instructor for the purpose of directing lecture materials and evaluating class needs for instruction on particular topics or concepts. Participation is optional and no marks are given for discussion entries. Materials directing students on how to use the WebCT resources will be distributed in class. Additional help is available at the Library Computer Labs.

Plagiarism and Cheating

Students are encouraged to form study and discussion groups, however, assignments must be the independent work of the individual seeking credit for the assignments and students should be prepared to demonstrate that the work they turn in is their own. All forms of plagiarism and cheating are serious violations of academic integrity and will be dealt with as such. Students are responsible for familiarizing themselves with GPRC policy on plagiarism and cheating as outlined under *Student Responsibilities* and *Plagiarism and Cheating* in the Student Handbook.