

# GRANDE PRAIRIE REGIONAL COLLEGE DEPARTMENT OF ARTS AND EDUCATION PH 1250 Practical Logic (and Critical Thinking) September-December 2013 3 (3-0-0) UT 45 Hours

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**Office hours:** Mon, Thurs. 3-4:30 p.m. and by appointment

Prerequisite: None

### **Required Readings:**

- Lewis Vaughn and Chris MacDonald, <u>The Power of Critical Thinking, 3rd Canadian edition</u>. Don Mills, Ontario: Oxford University Press, 2013.

- Moodle postings, selected internet readings and handouts.

#### Recommended:

- Cederblom, Jerry and David W. Paulsen, <u>Critical Reasoning: Understanding and Criticizing Arguments and Theories</u>, 6<sup>th</sup> edition. Belmont, California: Wadsworth, 2006.
- Sagan, Carl. <u>Demon-Haunted World: Science as a Candle in the Dark.</u> City: Ballantine Books, 1997
- Schick, Theodore and Lewis Vaughn, <u>How to Think About Weird Things:</u> Critical Thinking for a New Age, 6<sup>th</sup> edition. Toronto? McGraw-Hill, 2011.

### **Calendar Course Description**

Elementary methods and principles for analysing arguments will be covered. Topics may include informal fallacies, introduction of scientific method, elementary statistical reasoning, elementary propositional logic, rational decision procedures.

## **Content Description 2013**

People in many roles put forward arguments to try to persuade their audiences. Advertisers, lawyers, politicians, political analysts, researchers, scientists, participants in debates over moral issues, and many others strive to make their cases by presenting evidence in support of their conclusions.

This course is an introduction to the careful, systematic evaluation of arguments and the language in which they are advanced. In addition to assessing the role of rhetoric and appeals to emotion, attention will be given to identifying components of arguments, and discussing correct and flawed forms of arguments. Requirements for making good deductive and inductive arguments will be examined, as will the use and abuse of statistics. A variety of fallacies in arguments will be explored, too. Concluding topics include scientific theories, religious beliefs, "weird beliefs," conspiracy theories and hoaxes. When do we have good reason to believe – or expose – them?

#### **Contact Hours:**

PH1250 is a three credit course with three hours of instructional time a week.

### **Delivery Mode:**

Classroom time will be used for lectures and discussions.

### Course Objectives:

Upon completion of the course you should have the ability to:

- identify the strengths and weakness of arguments as forms of reasoning
- construct arguments of your own that provide strong support for the conclusions advanced, without committing errors of reasoning
- discuss some basic ideas in Philosophy such as skepticism, subjectivism, objectivity, truth, etc.

# Transferability: UA, UC, UL, AU, AF, CUC, GMU, KUC

Students should check with other institutions concerning transfer of credits as all arrangements are subject to change. Note that a grade of D or D+ may not be accepted at other post-secondary institutions.

# **Course Requirements:**

First assignment	10%
Argumentative essay	.20%
First exam	20%
Second exam	20%
Final examination	.30%

Marks will be given in percentages before conversion to a letter grade.

\*Please be informed that it is not the instructor's policy to allow exams or assignments to be rewritten, or extra work done to increase marks. You are welcome, however, to consult with the instructor prior to exams and assignment due dates.

### **Conversion table for grading:**

For conversion of letter grades to the four-point scale, see the GPRC calendar.

## **Student Responsibilities:**

- \* You are expected to devote time in the classroom to the class itself. Use of cell phones and use of laptops for non-class purposes is unacceptable. It is also not acceptable to socialize or do work on other courses during the class.
- \* You are strongly advised to keep a copy of your own of any work you submit for grading at least until you have your work returned to you.
- \*\* Students who miss an excessive number of classes may be denied the opportunity to write the final exam, as stated in the Calendar.
- \*\*You are expected to write the final exam in December when scheduled by the Registrar's Office - with possible exceptions in the case of compelling and urgent circumstances beyond your control. Take this into account when making any travel plans. Also note and observe other key dates during the term as provided in the Calendar.

# **Statement on Plagiarism and Cheating:**

\* You are required to reference sources fully and properly for written assignments. You are responsible for familiarizing yourself with College Calendar information pertaining to cheating and plagiarism, for which there are various penalties depending on the severity of the offense. The Calendar information on student conduct and misconduct can be accessed in the print edition on pages 44-46 and on line at:

https://www.gprc.ab.ca/programs/viewcatalog.1.-1.14.html

### **Provisional Course Topic List and Schedule**

10, 12, 17 Sept.: I. Introduction. The field of Philosophy. Logic and critical thinking. The nature and role of arguments.

19, 24, 26 Sept.: II. The environment of critical thinking. Objectivity and truth. Obstacles to making and recognizing good arguments. Skepticism, cynicism, egoism. Realism and relativism.

1, 3 Oct.: III. The use of language in arguments. Definitions. Vagueness and ambiguity. Rhetoric. And more...

Tues. 8 Oct.: FIRST EXAM

10, 15, 17 Oct.: IV. More obstacles to good reasoning. Reliance on experts. Evaluating internet and other sources.

22 Oct.: V. Assessing claims in the news and advertising.

24, 29 Oct.: VI. Informal fallacies. Common mistakes in arguments.

31 Oct., 5, 7 Nov.: VII. An introduction to logic and kinds of arguments.

Deductive arguments.

Tues. 12 Nov.: SECOND EXAM

14, 19 Nov.: VIII. Inductive arguments. Polls. Causal arguments. Mixed arguments.

21 Nov.: IX. The use, misuse and abuse of numbers and statistics.

26 Nov.: X. Conduction, Convergent arguments, Inference to the best explanation and abduction.

28 Nov.: XI. Theories, Science, Scientific Theories, Religion and "Weird Beliefs"

5 Dec.: XII. Conspiracy theories and hoaxes.

10 Dec.: XIII. (time permitting). Moral arguments and theories.