

# **DEPARTMENT OF ARTS AND EDUCATION**

## **COURSE OUTLINE - FALL 2015**

### PH1250 (A2) PRACTICAL LOGIC - 3 (3-0-0) 45 Hours

INSTRUCTOR:	Dr. Tom Enders	PHONE:	780-539-2996
OFFICE:	C-415	E-MAIL:	tenders@gprc.ab.ca

**OFFICE HOURS:** By arrangement with instructor.

### PREREQUISITE(S)/COREQUISITE(S): None

### **REQUIRED TEXT/RESOURCE MATERIALS:**

- Lewis Vaughn and Chris MacDonald, *The Power of Critical Thinking*, *3rd Canadian edition*. Don Mills, Ontario: Oxford University Press, 2013.
- Moodle postings, selected internet readings and handouts.

Recommended:

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

#### CALENDAR DESCRIPTION:

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

**CREDITS/CONTACT HOURS**: 3 credits / 3 hours per week

### DELIVERY MODE:

Classroom time will be used for lectures, examination of examples, exercises and discussions.

# **COURSE OBJECTIVES**:

This course will introduce students 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 good 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.

The course will also present and examine possible criteria for good theories and good scientific theories. Time permitting, religious beliefs, "weird beliefs," conspiracy theories and hoaxes will also be analyzed.

# **LEARNING OUTCOMES:**

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

- discuss philosophically some basic ideas and phenomena such as skepticism, cynicism, subjectivism, objectivity, truth, etc.

- identify the strengths and weaknesses of different kinds of arguments in general and in particular cases

- construct arguments of your own that provide strong support for the conclusions advanced, without committing errors of reasoning

# 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.

# **EVALUATIONS**

First assignment	10%
Concept application 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.

Alpha Grade	Percentage Guidelines	Alpha Grade	Percentage Guidelines	Alpha Grade	Percentage Guidelines	Alpha Grade	Percentage Guidelines
A+	90-100	B+	76-79	C+	67-69	D+	55-59
A	85-89	В	73-75	С	64-66	D	50-54
A-	80-84	B-	70-72	C-	60-63	F	0-49

## **GRADING CRITERIA:**

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, tablets and laptops for non-class purposes is unacceptable. It is also not acceptable to socialize or do work on other courses (or even *other* work for this course) 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. See College calendar, pages 42-43. You can also refer to the College Policy on Student Conduct at

https://www.gprc.ab.ca/files/forms\_documents/Student\_Misconduct.pdf

\*\*Note: all Academic and Administrative policies are available at <a href="https://www.gprc.ab.ca/about/administration/policies/">https://www.gprc.ab.ca/about/administration/policies/</a>

## COURSE SCHEDULE/TENTATIVE TIMELINE:

First two weeks -

Introduction to the course and

I. Introduction. A. Philosophy, its field and subfields. The nature and role of arguments. Logic and critical thinking. B. Critical thinking, practical logic and argument. C. Arguments and their parts.

Weeks 3 and 4 -

II. The Environment of Critical Thinking. Obstacles to good reasoning and arguments. A. Introduction B. Psychological obstacles. C. Obstacles to making and recognizing good arguments - in the form of basic ideas, beliefs and attitudes.

Weeks 5 and 6 -

III. The Use of Language in Arguments. A. Introduction. B. Vagueness and ambiguity C. Use of words that conceal. D. Definitions. E. Denotation and Connotation. F. Rhetoric.

Tuesday 13 October: FIRST EXAM

Week 7 –

IV. More Obstacles to good reasoning. A. Personal factors. B. Unwarranted reliance on experts. C. Evaluating internet and other sources.

Week 8 -

V. Assessing Claims in the News Media, Entertainment and Advertising. A. News Media. B. Entertainment. C. Advertising.

Week 9 –

VI. Informal Fallacies. Common mistakes in arguments.

Week 10 -

VII. The use, misuse and abuse of numbers and statistics.

Tuesday 10 November: SECOND EXAM

Week 11 – VIII. An Introduction to Logic. A. Kinds of arguments. B. Deductive arguments.

Week 12 – IX. Inductive Arguments. A. Introduction. B. Enumerative inductive arguments, including opinion polls. C. Statistical syllogisms. D. Analogical arguments. E. Mixed arguments. F. Causal arguments.

Week 13 – X. Other Forms of Arguments. A. Review. B. Convergent arguments. C. Abduction and Inference to the Best Explanation.

Week 13 and 14 – XI. Criteria for Good Theories, Science, Scientific Theories, Religion and "Weird Beliefs"

Time permitting – XII. Conspiracy theories and hoaxes.