

## DEPARTMENT HUMANITIES AND SOCIAL SCIENCES

### COURSE OUTLINE – Fall 2024

#### PH1250 (A2): Practical Logic – 3 (3-0-0) 45 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

|                      |                          |                |                       |
|----------------------|--------------------------|----------------|-----------------------|
| <b>INSTRUCTOR:</b>   | Hugh Hunter              | <b>PHONE:</b>  | 780-539-2823          |
| <b>OFFICE:</b>       | C421                     | <b>E-MAIL:</b> | jhunter@nwpolytech.ca |
| <b>OFFICE HOURS:</b> | Appointments by request. |                |                       |

#### CALENDAR DESCRIPTION:

Practical logic is the study of critical thinking in everyday contexts. This class is foundational to all aspects of life, including our professional and personal lives. Without critical thinking people may not be able to differentiate between mere opinion and knowledge, which makes them susceptible to holding false beliefs without the means to make corrections. Critical thinking skills teach us how to identify mistakes in reasoning and how to correct these mistakes. This course teaches students the basic concepts of informal logic required for critical thinking. These concepts include the components of arguments, how to analyze logical inferences, and how to evaluate persuasive language as it is often presented in politics, news, social media, business, and even around the dinner table. In addition, students will learn how to identify logical fallacies, how to recognize good evidence (scientific or otherwise), and how to have fruitful discussions with others about even the most contentious topics.

#### PREREQUISITE(S)/COREQUISITE:

None

#### REQUIRED TEXT/RESOURCE MATERIALS:

MacDonald, Chris and Vaughn, Lewis (2016). *The Power of Critical Thinking* (5th Cdn. ed.). Don Mills, ON: Oxford University Press.

#### DELIVERY MODE(S):

On-Campus for students enrolled in section A2.

## LEARNING OUTCOMES:

- Analyze arguments based on their structure and what counts as evidence for them.
- Analyze arguments to address common mistakes in reasoning.
- Evaluate the validity of deductive arguments using propositional logic.
- Evaluate the validity of deductive arguments using categorical logic.
- Analyze the reasoning used to support our everyday beliefs.
- Analyze the reasoning used to support scientific claims.
- To gain an understanding of important philosophical approaches to critical thinking.
- To develop critical thinking and problem-solving skills through the analysis of logical structure.
- To apply the analysis of logical structure to assumptions, values, principles, and reasoning as they affect society.
- See section on What we do in Philosophy for more.

## TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <https://transferalberta.alberta.ca/>.

**\*\* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

## EVALUATIONS:

|                                     |       |   |
|-------------------------------------|-------|---|
| Participation                       | 10%   |   |
| Comprehension Quizzes x 8 (5% each) | 40%   | September 16, September 23, October 3, October 28, November 4, November 18, November 25, December 2<br>(Optional extra quiz December 9, replaces your lowest grade) |
| Midterm Exam                        | 20%   | Friday, October 21  |
| Final Exam                          | 30%   | TBA   |
| Final Essay Option                  | (30%) | Students MAY propose a final research essay no later than November 6 to replace the final exam.   |

(A final exam will be scheduled by the Registrar during the final exam period (December 11 to 19). The final exam is due during the final exam period. Please check the registrar's posting for a schedule of final examinations.)

## Expected Statutory Holidays and Breaks: (no class on these days)

Monday, September 30, National Day for Truth and Reconciliation

Monday, October 14—Thanksgiving

November 12th to November 15th—Fall Break

## Class Participation:

Philosophy exists in dialogue, and your active participation will help you improve in philosophy.

Participation means doing the readings and bringing your questions and ideas to class. As you read, ask

yourself, “Is this true?” “Did that argument make sense?” These questions will help you flag passages to raise in class. Participation also consists in engaging in your responsibility to find important information on the course outline, keeping track of due dates, submitting material on time, and keeping up with course content when you are unable to attend class, which includes watching recorded lectures. Your grade will be based on a combination of all these aspects of participation.

Quizzes:

The quizzes are take-home and should be completed through D2L prior to the due date. Students should be prepared to answer content questions from material covered in class, which includes lectures, in-class discussion, and course readings. It is therefore to students’ advantage to attend every class.

Midterm and Final Exams:

The exams are “in-class” (see the requirements for VC students below). These exams are students’ opportunity to practice the concepts covered in class in a practical manner.

- Exam and quiz deferrals may only be granted in extenuating circumstances such as extreme illness or other serious circumstances beyond the student’s control. Work commitments, holidays, or forgetfulness are not considered legitimate reasons for missing assigned deadlines.

Contesting Grades:

There should never be any reason for you to feel ashamed or angered by your grade. One of my priorities in this class is to help you learn, and the assignments and my comments on your work are aimed at this goal. I do not expect perfection, and neither should you. I expect you to do your best and to use the assignments to help guide you on how you can improve.

If you wish to contest your grade, please do the following:

1. Double check the assignment instructions and the grading criteria.
2. Thoroughly read all the comments in a charitable manner.
3. Make an appointment or come see me after class your grade at least 24 hours after receiving your graded assignment. It is my policy never to discuss assignments on the day they have been handed back.
4. Come prepared. After looking over the comments and the assignment requirements, you should be able to tell me why you think your answer should have earned more marks.
5. Please remember I can only give you grades for the content represented on the assignment. You may be able to verbally articulate what you meant to say in the meeting, but if that meaning is not clearly illustrated in the assignment content, I cannot give you grades for it.

**GRADING CRITERIA:**

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

| Alpha Grade | 4-point Equivalent | Percentage Guidelines |  | Alpha Grade | 4-point Equivalent | Percentage Guidelines |
|-------------|--------------------|-----------------------|--|-------------|--------------------|-----------------------|
| A+          | 4.0                | 95-100                |  | C+          | 2.3                | 67-69                 |
| A           | 4.0                | 85-94                 |  | C           | 2.0                | 63-66                 |

|    |     |       |    |     |       |
|----|-----|-------|----|-----|-------|
| A- | 3.7 | 80-84 | C- | 1.7 | 60-62 |
| B+ | 3.3 | 77-79 | D+ | 1.3 | 55-59 |
| B  | 3.0 | 73-76 | D  | 1.0 | 50-54 |
| B- | 2.7 | 70-72 | F  | 0.0 | 00-49 |

### COURSE SCHEDULE/TENTATIVE TIMELINE:

|              |   |
|--------------|---|
| 4 September  | Introduction  |
| 9 September  | Chapter 1: The Power of Critical Thinking   |
| 11 September | <ul style="list-style-type: none"> <li>Chapter 3: Making Sense of Arguments</li> <li><b>Quiz 1: September 16</b></li> <li><b>Quiz 2: September 23</b></li> </ul>  |
| 16 September |   |
| 18 September |   |
| 23 September |   |
| 25 September | <ul style="list-style-type: none"> <li>Chapter 4: Reasons for Belief and Doubt</li> </ul>   |
| 30 September | NO CLASS  |
| 2 October    | Chapter 4: Reasons for Belief and Doubt continued   |
| 7 October    | <ul style="list-style-type: none"> <li><b>Quiz 3: October 7</b></li> <li>Chapter 6: Deductive Reasoning: Propositional Logic</li> </ul>   |
| 9 October    |   |
| 14 October   | THANKSGIVING – NO CLASS   |
| 16 October   | Review/Catch Up   |
| 21 October   | Mid Term Exam   |
| 23 October   | <ul style="list-style-type: none"> <li>Finish up Chapter 6: Deductive Reasoning</li> <li><b>Quiz 4: October 28</b></li> </ul>   |
| 28 October   |   |
| 30 October   | <ul style="list-style-type: none"> <li><b>Quiz 5: 4 November</b></li> <li>Chapter 7: Deductive Reasoning: Categorical Logic</li> <li><b>Deadline to suggest an essay to replace the Final Exam</b></li> </ul> |
| 4 November   |   |
| 6 November   |   |
| 11 November  | FALL BREAK  |
| 13 November  | FALL BREAK  |
| 18 November  | <ul style="list-style-type: none"> <li>Chapter 7: Deductive Reasoning: Categorical Logic</li> <li><b>Quiz 6</b></li> </ul>  |
| 20 November  | <ul style="list-style-type: none"> <li>Chapter 8: Inductive Reasoning</li> <li><b>Quiz 7: 25 November</b></li> </ul>  |
| 25 November  |   |
| 27 November  | <ul style="list-style-type: none"> <li>Chapter 5: Fallacies and Persuaders</li> <li><b>Quiz 8: 2 December</b></li> </ul>  |
| 2 December   |   |
| 4 December   |   |
| 9 December   | Review/Catch Up   |

## **STUDENT RESPONSIBILITIES:**

Responsibilities of all students:

1. Please do not be late for class.
2. Students are expected to complete assigned readings before class. Do not fall behind in the assigned readings because it is difficult to catch up.
3. If students miss class, it is their responsibility to obtain the information they missed. If available, recorded lectures may be shared in the case of reasonable absences.
4. Policies regarding final exams are governed by institutional policy. Students should consult the Examinations policy in the NWP Calendar. Students should consult the NWP Calendar for any questions regarding deferred exams but note that students are required to be available to write exams during the entire final exam period.

## **STATEMENT ON ACADEMIC MISCONDUCT:**

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

\*\*Note: all Academic and Administrative policies are available on the same page.

## **Additional Information:**

### What we do in Philosophy

Philosophers are sort of like product testers for ideas. A product tester doesn't test a product under regular use conditions, but rather puts the product into extreme conditions. For example, if a product is designed to run at -25° Celsius, a product tester might try to see if it works at -35°, because if it works in -35° it's safe to say it will work in -25°. In philosophy, we subject ideas to stress tests by considering the extreme cases. As you read through the readings, you'll find some unlikely and strange scenarios. We want to see if our ideas work in those scenarios, because if our ideas work in weird, extreme scenarios we can be sure they will work in ordinary cases as well.

Just like product testers, the fact that we are testing an idea doesn't mean that we believe it. Sometimes we don't even like the idea! But a product tester is neutral. The point is just to run the tests and see how the idea performs. We must always remember that we are testing ideas, not the people who happen to believe in them. As the philosopher Socrates often said, someone who shows you a problem with an idea that you believe in is doing you a favour by showing you how you that there are better, truer ideas out there to be discovered.

### Additional Rules

- You are adults. Please treat class as you would any professional setting. That means governing your actions so as not to disrupt the class.
  - Feel free to use your technology discretely so long as it does not distract others.

- If you need to take a call, leave to use the bathroom or leave early, do it quietly so as not to disrupt the class on the way out.
- Don't start conversations on the side that will disrupt the class (join in class discussion instead!)