

Miyazaki International College  
Course Syllabus  
Fall 2022

Course Title ( Credits )	PHI301: Logic (3 Credits)
Course Designation for TC	N/A
Content Teacher	
Instructor	Anderson Passos
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Office hours	月曜一金曜 14:00-16:00

Course Description:										
Students learn how to analyze and classify the logic used in everyday life including deductive and inductive reasoning, the uses of inference, paradox, and types of faulty reasoning.										
Course Objectives:										
In this course, participants will: <ul style="list-style-type: none"> <li>- Understand the fundamental principles of argument analysis</li> <li>- Distinguish between premises and conclusions</li> <li>- Recognize arguments from non-arguments</li> <li>- Identify fallacies.</li> </ul>										
Teaching Methodology:										
Course objectives will be achieved through a variety of active learning teaching strategies, including but not limited to:										
<table border="1" style="width: 100%;"> <thead> <tr> <th style="background-color: black; color: white;">Active Learning Teaching Strategy</th> <th style="background-color: black; color: white;">Course Schedule</th> </tr> </thead> <tbody> <tr> <td>Interactive lectures with note taking</td> <td>Every class</td> </tr> <tr> <td>Pause for Reflection</td> <td>Every class</td> </tr> <tr> <td>Pair &amp; Group work</td> <td>Lessons with even numbers</td> </tr> <tr> <td>Presentations</td> <td>Lessons 29 and 30</td> </tr> </tbody> </table>	Active Learning Teaching Strategy	Course Schedule	Interactive lectures with note taking	Every class	Pause for Reflection	Every class	Pair & Group work	Lessons with even numbers	Presentations	Lessons 29 and 30
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Pair & Group work	Lessons with even numbers									
Presentations	Lessons 29 and 30									

Course Schedule:		
Day	Topic	Content/Activities
1	Reconstructing and analyzing arguments	1.1 What is an argument? 1.2 Identifying arguments
2		Exercises, worksheets and/or group discussion
3		1.3 Arguments vs. explanations 1.4 More complex argument structures 1.5 Using your own paraphrases of premises and conclusions to reconstruct arguments in standard form
4		Exercises, worksheets and/or group discussion
5		1.6 Validity 1.7 Soundness 1.8 Deductive vs. inductive arguments
6		Exercises, worksheets and/or group discussion
7		1.9 Arguments with missing premises 1.10 Assuring, guarding, and discounting 1.11 Evaluative language 1.12 Evaluating a real-life argument
8		Exercises, worksheets and/or group discussion
9	Formal methods of evaluating arguments	2.1 What is a formal method of evaluation and why do we need them? 2.2 Propositional logic and the four basic truth functional connectives 2.3 Negation and disjunction 2.4 Using parentheses to translate complex sentences
10		Exercises, worksheets and/or group discussion
11		2.5 "Not both" and "neither nor" 2.6 The truth table test of validity 2.7 Conditionals 2.8 "Unless"

12		Exercises, worksheets and/or group discussion
13		2.9 Material equivalence 2.10 Tautologies, contradictions, and contingent statements 2.11 Proofs and the 8 valid forms of inference 2.12 How to construct proofs
14		Exercises, worksheets and/or group discussion
15		2.13 Short review of propositional logic 2.14 Categorical logic 2.15 The Venn test of validity for immediate categorical inferences
16		Exercises, worksheets and/or group discussion
17		2.16 Universal statements and existential commitment 2.17 Venn validity for categorical syllogisms
18	Evaluating inductive arguments and probabilistic and statistical fallacies	3.1 Inductive arguments and statistical generalizations 3.2 Inference to the best explanation and the seven explanatory virtues
19		Exercises, worksheets and/or group discussion
20		3.3 Analogical arguments 3.4 Causal arguments
21		Exercises, worksheets and/or group discussion
22		3.5 Probability 3.6 The conjunction fallacy 3.7 The base rate fallacy
23		Exercises, worksheets and/or group discussion
24		3.8 The small numbers fallacy 3.9 Regression to the mean fallacy 3.10 Gambler's fallacy
25		Informal fallacies

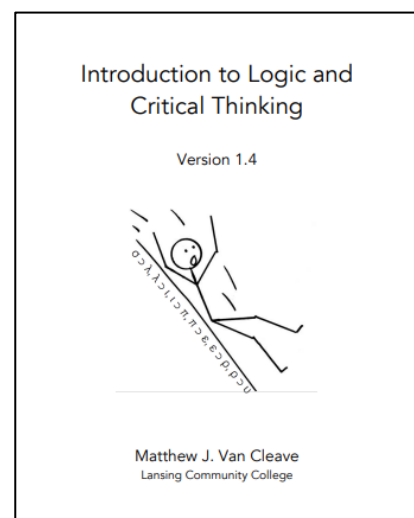
		4.1.3 Begging the question fallacy 4.1.4 False dichotomy 4.1.5 Equivocation
26		Exercises, worksheets and/or group discussion
27		4.2 Slippery slope fallacies 4.2.1 Conceptual slippery slope 4.2.2 Causal slippery slope
28		Exercises, worksheets and/or group discussion
29		4.3 Fallacies of relevance 4.3.1 Ad hominem 4.3.2 Straw man 4.3.3 Tu quoque 4.3.4 Genetic 4.3.5 Appeal to consequences 4.3.6 Appeal to authority
30		Exercises, worksheets and/or group discussion
	Final Examination	

**Required Materials:**

No textbooks are necessary as the main text can be freely downloaded. Students are responsible for printing out the pages for the lesson (if necessary).

When necessary, extra handouts will be given in class.

The course uses the material developed by Matthew J. Van Cleave, available free of charge and downloadable from our Moodle course page.



## Course Policies (Attendance, etc.)

### **Student Responsibilities**

As a class member, you are responsible for attending all classes and arriving on time, for participating as a member of a group, and for completing and handing in all assigned work.

### **Attendance and Lateness**

- You can be absent a maximum of 4 times
- If you are more than 20 minutes late, you will be given an absence
- Two lateness are equal to one absence

If you sum up more than 4 absences (e.g. 3 absences and 3 lateness), you will be asked to withdraw from the course. Failing to do so will result in an automatic "F" grade.

### **Homework**

The homework should be handed in at the beginning of every class. All homework submitted after that will **not** be considered.

### **Excused Absences**

Excused Absence forms should be brought to instructors as soon as possible. If you know you will be missing classes talk to us beforehand so we can arrange make-up work.

### **Late Assignments**

It is your responsibility to look for the instructor and check what assignments are due. Also, if you miss a class, it is your responsibility to contact the instructors to get handouts and explanations (missing a class is no excuse for not handing in homework).

## Class Preparation and Review

Students are expected to spend at least one hour preparing for every hour of lesson, and one hour reviewing and doing homework. Make sure you review your notes after each class and make sure you understand the topics covered. Instructors are available outside the classroom in case students need additional assistance (please check office hours on the first page of this syllabus).

Very often, you will have homework assignments. Make sure you review those before coming to the next class. Also, check the class Content/Activities so you can be prepared for the class.

## Grades and Grading Standards

- Participation and Homework: 20%
- Mid-term 40%
- Final exam: 40%

## Methods of Feedback:

Homework assignments will be graded and returned within a week of submission. Additional comments and feedback will be given verbally in class, but students are encouraged to come to instructor's office during office hours in case extra explanations are needed.

Tests are usually graded using a rubric which will be made available and explained during the test period. Students are encouraged to ask additional clarification before the test starts.

Participation is required not only answering questions, but also asking questions.

## Diploma Policy Objectives:


Work completed in this course helps students achieve the following Diploma Policy objective(s):

- 1: Advanced thinking skills (comparison, analysis, synthesis, and evaluation) based on critical thinking (critical and analytic thought)

## Notes:



This course aims at giving students a better understanding of arguments and find fallacies in real life. Such ability will allow our students to construct effective arguments towards responsible consumption and production as well as help them make strong arguments towards peace and justice.

<p>文部科学省から採択された 大学教育再生加速プログラム</p> 		Advanced	Proficient	Developing	Emerging	No Attempt
Critical Thinking	Ability to Identify & Solve Problems	<p>Insightful comments in class discussions Student shows proven ability to analyze data, gather and assess resources, and disseminate opinions in a scholarly manner.</p>	<p>Able to contribute to class discussions, and to perform a basic analysis of data, gather and assess resources, and express opinions in an adequate manner.</p>	<p>Beginning to visualize the ways in which information can be combined and applied to solving a given problem, but struggles with complex and relationships</p>	<p>Student shows motivation but must learn the concepts and mechanisms that apply to critical thinking, such as information gathering, assessment and synthesis</p>	
	Information Gathering					
	Assessment of Credibility					
	Social Skills					
	Professional Skills					
Global Perspectives	Cultural Relevancy	<p>Fully engaged in current events and shows and understanding of social inequalities and cultural differences.</p>	<p>Student is aware of current events and world cultures, but is unable to apply macro-level situations to her/his own life.</p>	<p>Exhibits interest and intrigue in current events and world culture, but has difficulty understanding relevancy.</p>	<p>Student expresses one-sided ideals from an ethnocentric point of view. Completely lacks awareness of world issues or events.</p>	<p>Insufficient effort or evidence of achievement</p>
	Awareness of Current Events & Global Issues					
English Language Ability	Reading	<p>Exhibits fluency/near fluency in speaking and writing. Grammar and reading ability similar to native English speaker. Able to use context clues when faced with unfamiliar vocabulary.</p>	<p>Proficient English ability; relies mainly on familiar vocabulary. Should be encouraged to advance beyond comfort zone.</p>	<p>Adequate English ability; must reference dictionary often</p>	<p>Student has some English ability, but lacks confidence in using and understanding. Very limited vocabulary knowledge, struggles with grammar and pronunciation Unable to form questions</p>	
	Writing					
	Oral Communication					
	Writing					
	Oral Communication					