#### PRINCIPLES OF REASONING AND ARGUMENTATION (LOGIC) Spring 2015 Dr. Christine A. James

Philosophy 2020 Section A and G TR 8:00am-9:15am (Section A, CRN 21153) and TR 5:00-6:15pm (Section G, CRN 22377) in West Hall 150 Office: 1203 Ashley Hall Office Hours: MTWR 3:30pm-4:45pm and after classes and by appointment as needed/requested. Telephone: 259-7609 Mailbox: Philosophy and Religious Studies Department Office, Ashley Hall North Side First Floor Fax: 259-5011 E-mail address: chjames@valdosta.edu

Please note that specific dates for readings and graded assignments in the syllabus may be adjusted and updated throughout the semester. The latest version of the syllabus will always be available at <a href="http://mypages.valdosta.edu/chjames/2020Spring2015.html">http://mypages.valdosta.edu/chjames/2020Spring2015.html</a>

**Course Content:** What does it take to express an idea well? What does it mean to convince someone? Logic provides a method to systematically analyze expressions and arguments. This course provides an introduction to logic, using examples from a variety of perspectives: law, science, and everyday experience. We will cover sentential logic (involving sentences using "not", "and", "or", and "if..., then..."), we will use truth-table and natural deduction techniques, and we will cover elementary quantifier logic (involving sentences using "all" and "some"). These techniques will help you to recognize arguments, evaluate arguments for validity, think critically, and use arguments well in your own writing. We will also apply these skills to real-world situations, including legal case studies.

This course was developed as part of an Affordable Learning Georgia Textbook Transformation Grant awarded to faculty at Valdosta State University. The purpose of these grants is to combat the high cost of textbooks. In the case of logic textbooks used in the State System of Georgia's introductory level logic courses, most textbooks cost in the neighborhood of \$100-\$200. This grant enabled us to create a repository of Open Educational Resources and Creative Commons materials, design a course around those materials, and teach two pilot sections of those courses in the Spring of 2015. Thank you for participating in this project, and taking the first free Logic course available at VSU.

### LEARNING OUTCOMES:

In accordance with the revised learning outcomes for the Core Curriculum of the Georgia State System, and the VSU Core Curriculum, our course follows the Area C Learning Outcome:

"Students will analyze, evaluate, and interpret diverse forms of human communication."

The Learning Outcomes for PHIL 2020 are:

1. Use more advanced logical and critical reasoning techniques through the examination of various methods of logic from formal and informal traditions.

2. Discuss such topics as: the nature of critical thinking, classification, meaning, and definition; ambiguity and vagueness;

categorical logic; explanation and argument; techniques of persuasion; propositional logic; deduction and induction; and pseudo-reasoning (fallacies).

3. Apply these critical reasoning principles to a variety of problems and contexts, including writing and analysis in other courses.

4. Use the truth table method to determine the truth-value of compound sentences and to distinguish among tautologies, contingent sentences and contradictions.

5. Distinguish between valid and invalid argument forms, using the truth table method and the proof method.

6. Translate ordinary-language statements and arguments into the language of sentential logic and/or predicate logic, and vice versa.

7 Demonstrate that a given argument in symbolic form is valid or invalid.

These course-specific learning outcomes contribute to the departmental learning outcomes of the Philosophy and Religious Studies Major by enabling students better to

1. To encourage an understanding of central issues, topics and philosophers in the history of philosophy, from the ancient to the modern periods.

2. To develop students' abilities to think, write, and speak critically and logically.

3. To enable students to challenge their own ideas and to develop selfunderstanding in the context of a diverse range of ideas which inform contemporary controversies and social conflict.

4. To enable students to engage in independent philosophical research, and to be responsible for communicating their understanding of the issues

researched and developed, including a working familiarity with current research methods.

5. To incorporate philosophical positions in oral and written communications.6. To critically outline and analyze a philosophical question.

Members of the faculty in Philosophy and Religious Studies have verified that these outcomes are in line with the outcomes of the course as it is taught at peer institutions in the State System of Georgia.

**Requirements:** Three unit tests, daily homework graded in class, short presentation on fallacies, class participation, a comprehensive final exam. All assignments must be completed on schedule, and continual practice using the problems in each chapter is necessary for success in the course. You must be willing to work independently, and you must motivate yourself to learn the new vocabulary, to learn the rules of inference, and to practice new problems. Our time together in class will involve lecturing on new material, answering questions about relevant material, going over sample problems, and working in groups. I encourage discussion and participation in class.

**Required Texts:** None. See the readings and activities linked in Blazeview and in the Syllabus. Blazeview is VSU's version of Desire2Learn Brightspace, an online course portal with a variety of features.

### How grades will be calculated:

A	= 100 - 90%				
В	= 89 - 80%				
С	= 79 - 70%	Please note that I am not obligated to accept any late			
work,					
D	= 69 - 60%	and I do not have to give late examinations after the			
date listed on the					
F	= 59 - 0%	syllabus. You must complete work on time.			
		syllabus. You must complete work on time.			

First week of Blazeview items: First Discussion, First Dropbox, First Practice Quiz = 5%

Five Unit Quizzes = 25% Midterm Exam = 10% Final Exam = 10% Seven Unit Discussions = 35% <u>Three Required Logic App = 15%</u> Total = 100%

**Attendance Policy:** I do care that you attend class regularly. As you know, VSU policy states that missing 20% of class meetings results in an automatic

grade of "F". Faculty can also institute added attendance policies in their syllabi. Our class will have a 10% rule for absences. You can miss up to 10% of the class meetings with no grade penalty. 10% of our 30 class meetings is 3. On absence number 4, your final grade for the course will be reduced by one whole letter grade; on absence number 5, your final grade for the course will be reduced by two whole letter grades; on absence number 6, you will automatically fail the course. Be considerate of your fellow students – don't be late, and don't leave your cell phones and pagers on. No texting. Please note that this policy makes no distinction between excused and unexcused absences.

Access Statement: Valdosta State University is committed to providing inclusive learning environments for all students. However, students with disabilities may not always experience equal access to all learning objectives or assessments. If students anticipate or experience any learning barriers, they should notify the instructor as well as contact the Access Office to determine appropriate ways to eliminate barriers. The Access Office is located in Farber Hall and can be reached by calling 229-245-2498 (voice), 229-375-5871 (videophone), 229-219-1348 (tty) or 229-245-3788 (fax). You can also visit the website at <a href="http://www.valdosta.edu/student/disability/">http://www.valdosta.edu/student/disability/</a> or emailaccess@valdosta.edu for more information.

Academic Honesty: Members of the Valdosta State University faculty value honesty and integrity extremely highly and do not tolerate cheating of any kind. Anyone caught cheating will automatically fail the course. Cheating includes – but is not limited to – plagiarism, giving or receiving assistance on a quiz, having someone else do work on your behalf, doing work on someone else's behalf, and working with a partner or in a group on an individual assignment. By enrolling in this course, you are in effect promising to maintain the bond of trust on which the professor-student relationship is based. In addition, VSU has a new Academic Honesty Policy. Here is a link to the Academic Honesty Policies and Procedures:

http://www.valdosta.edu/academics/academic-affairs/vp-office/academichonesty-at-vsu.php

**E-Mail:** VSU policy mandates that all official communication by e-mail take place through VSU e-mail accounts or through the Blazeview Mail tool. Please check your VSU (@valdosta.edu) e-mail account regularly.

**Schedule:** You must come to class with the reading assignments already done, and you should have requests for homework problems to go over in class. Notice that homework assignments are associated with each section of the text, you should begin trying the homework problems as you read. These

are the homework problems that will prepare you for the quizzes and examinations.

# Note: This syllabus is not a legal contract; the content of this course is subject to revision by the professor.

#### Schedule of the course:

Month/Day Topics Homework

### <u> Tuesday, January 13 (1/13 T)</u>

Introduction to class. Begin homework, using the online information in Blazeview and clicking and reading the links in the course "Content" in Blazeview.

Remember to complete the first Discussion, Dropbox, and Quizzes! Our course includes regular work in Blazeview.

New

Blazeview: <u>http://www.valdosta.edu/academics/elearning/blazeview-</u> <u>d2l.php</u>

## <u>1/15 R</u>

Unit 1 Critical Thinking and Philosophy

In Unit 1, we will learn about the concept of Critical Thinking and practice applying it to evaluating positions, advertising, and disagreements in practical life.

Objective:

Use the tools and concepts of logic and critical thinking to evaluate and criticize arguments.

**Readings and Multimedia** 

Our reading on Critical Thinking is: <u>http://philosophy.hku.hk/think/critical/intro.php</u> Creative Commons NonCommercial Share and Share Alike

Please note that by Saturday, 1/17 at 11:59pm, you should have completed your first Discussion, Dropbox, and Introductory Quiz in Blazeview. These are all short items that simply show you are learning how the Blazeview course works.

### <u>1/20 T</u>

Continuing the Concepts of Critical Thinking Our video on Critical Thinking is: <u>http://learningcommons.ubc.ca/student-toolkits-2/thinking-critically/</u> Creative Commons Open Courseware Unported

### <u>1/22 R</u>

Reminder of all Unit 1 Online Activities: One Unit Quiz Two Unit Discussion Topics, due **Sunday 1/25 by 11:59pm** Self-Assessments, Short Multiple Choice, Ungraded for Practice within the Unit

Notetaking, Reviewing for the Unit 1 Critical Thinking Quiz (In the Quizzes Tool in Blazeview, under "Assessments," Must Be Completed by Sunday 1/25 by 11:59pm)

### <u>1/27 T</u>

Unit 2 Arguments

In Unit 2, we will address how arguments are structured in more detail.

Objective:

Become familiar with the parts of arguments and examples of different types of arguments.

### <u>1/29 R</u>

There are two readings in Unit 2:

Unit 2 Reading 1: ForAllx (For this unit, only read Chapter 1): <u>http://www.fecundity.com/codex/forallx.pdf</u> CC

Unit 2 Reading 2: from the Critical Thinking Web at the University of Hong Kong: http://philosophy.hku.hk/think/arg/ Creative Commons Attribution-Noncommercial-Share Alike

# <u>2/3 T</u>

Reviewing the Parts of Arguments and Considering Examples in Class

### <u>2/5 R</u>

Our video for Unit 2 comes from Oxford iTunesU: Nature of Arguments <u>https://itunes.apple.com/itunes-u/critical-reasoning-for-</u> <u>beginners/id387875757?mt=10#ls=1</u> CC Oxford Open U

### <u>2/10 T</u>

Reminder of Unit 2 Online Activities:

One Unit Quiz

Two Unit Discussion Topics, due **Wednesday 2/11 by 11:59pm** Self-Assessments, Short Multiple Choice Ungraded for Practice within the Unit

Notetaking, Reviewing for the Unit 2 Arguments Quiz (In the Quizzes Tool in Blazeview, under "Assessments," Must Be Completed by Wednesday 2/11 by 11:59pm)

## <u>2/12 R</u>

Unit 3 Fallacies

In Unit 3, we will discover fallacies. Fallacies are errors in reasoning that happen very often. There are names and categories for different fallacies. Objective:

Recognize fallacies by category; recognizing arguments with problems in relevance, sufficiency, acceptability.

## <u>2/17 T</u>

There are three readings in Unit 3:Unit 3 Reading 1: Fallacies andBiases <a href="http://philosophy.hku.hk/think/fallacy/">http://philosophy.hku.hk/think/fallacy/</a>Creative CommonsAttribution-Noncommercial-Share Alike

Unit 3 Reading 2: Fallacies pdf set <u>https://yourlogicalfallacyis.com/pdf/Logical\_Fallacies\_on\_A4.pdf</u> CC

### <u>2/19 R</u>

Unit 3 Reading 3: Stephen Downes' Guide to Logical Fallacies <u>http://www.fallacies.ca/download/fallacies.doc</u> CC BY Bring in an example of a fallacy that you found online or in news media publications, and present it to the class.

### <u>2/24 T</u>

Reminder of Unit 3 Online Activities: Midterm Exam Two Unit Discussion Topics, due **Wednesday 2/25 at 11:59pm.** Self-Assessments, Short Multiple Choice Ungraded for Practice within the Unit

# The Midterm Exam is an extended Quiz in the Blazeview Assessments>Quizzes Tool, due by Wednesday 2/25 at 11:59pm.

### <u>2/26 R</u>

Unit 4 Symbolic Logic (Sentential)

In Unit 4 we will learn how to analyze arguments based on their sentence structure. There are ways to symbolize particular kinds of sentences, and then use those symbols to find out what makes a sentence true or false, and whether or not sentences in the form of arguments actually follow from each other with deductive validity or not.

Objective:

Determine truth values using truth tables, generate proofs from rules of inference, and determine the validity of symbolized arguments.

There are six readings in Unit 4:

Unit 4 Reading 1: ForAllx Chapter

2 <u>http://www.fecundity.com/codex/forallx.pdf</u> CC

<u>3/3 T</u>

Unit 4 Reading 2: Necessary and Sufficient Conditions <u>http://philosophy.hku.hk/think/meaning/nsc.php</u> Creative Commons Attribution-Noncommercial-Share Alike

Unit 4 Reading 3: Module on Basic Logic <u>http://philosophy.hku.hk/think/logic/intro.php</u> Creative Commons Attribution-Noncommercial-Share Alike

Our online multimedia app is: The Logic App - <u>http://www.hatzicware.com/jLogic/</u> (Work in this Unit includes making screencaptures of your work in the Logic App.)

# <u>3/5 R</u>

# Post your first screencap of a Logic App proof in Discussions by today's class.

Unit 4 Reading 4: Module on Sentential Logic <u>http://philosophy.hku.hk/think/logic/intro.php</u> Creative Commons Attribution-Noncommercial-Share Alike

## <u>3/10 T</u>

Unit 4 Reading 5: Truth Tables <u>http://www.butte.edu/~wmwu/iLogic/3.2/iLogic\_3\_2.html</u> CC BY

## <u>3/12 R</u>

Unit 4 Reading 6: ForAllx Chapter 3 <u>http://www.fecundity.com/codex/forallx.pdf</u> CC

# Post your second screencap of a Logic App proof in Discussions by today's class.

## <u>3/17 T</u>

Our video on Symbolic Logic is: Different Types of Arguments <u>https://itunes.apple.com/itunes-u/critical-</u> reasoning-for-beginners/id387875757?mt=10#ls=1 CC Oxford Open U

# Post your third screencap of a Logic App proof in Discussions by today's class.

## <u>3/19 R</u>

Reminder of Unit 4 Online Activities: One Unit Quiz At least 2 Unit Discussion Topics, to include posting of Logic App screencaptures (due throughout the Unit) Self-Assessments, Short Multiple Choice Ungraded for Practice within the Unit The Unit 4 Quiz (In the Quizzes Tool in Blazeview, under "Assessments," Must Be Completed by Thursday 3/19 by 11:59pm)

### <u>3/24 T - 3/26 R</u>

No Classes This Week, Spring Break

### <u>3/31 T</u>

Unit 5 Syllogisms and Venn Diagrams

In Unit 5 we will learn how to analyze arguments made up of categorical propositions. These arguments, called syllogisms, are evaluated using Venn diagrams, mood, and figure to determine the validity of syllogisms.

Objective:

Translate categorical propositions and Venn Diagrams, use Venn diagrams to establish mood and figure, and use Venn Diagrams to evaluate syllogistic arguments for validity.

There are two readings in Unit 5:

Unit 5 Reading 1: Module on Venn Diagrams <u>http://philosophy.hku.hk/think/logic/intro.php</u> Creative Commons Attribution-Noncommercial-Share Alike

# <u>4/2 R</u>

Unit 5 Reading 2: Venn Diagrams <u>http://www.butte.edu/~wmwu/iLogic/2.5/iLogic 2 5.html</u> CC BY

## <u>4/7 T</u>

Our video on Syllogisms and Venn Diagrams is: Evaluating Arguments <u>https://itunes.apple.com/itunes-u/critical-reasoning-for-beginners/id387875757?mt=10#ls=1</u> CC Oxford Open U

### <u>4/9 R</u>

Reminder of Unit 5 Online Activities: One Unit Quiz At least 2 Unit Discussion Topics due **Thursday 4/9 by 11:59pm** Self-Assessments, Short Multiple Choice Ungraded for Practice within the Unit The Unit 5 **Quiz (In the Quizzes Tool in Blazeview, under "Assessments," Must Be Completed by Thursday 4/9 by 11:59pm)** 

## <u>4/14 T</u>

Unit 6 Logic and Research

In Unit 6 we will evaluate different types of research, and the concepts associated with creating a literature review for an argumentative research paper. We will discuss primary sources and secondary sources, and how to summarize argumentative positions in research articles.

Objective:

Evaluating peer-reviewed source material, writing from the perspective of argumentative essays and critiquing research based arguments.

There are three readings in Unit 6:

Unit 6 Reading 1: Empire State College Information Skills Tutorial <u>http://commons.esc.edu/informationskills/evaluate/</u> Creative Commons Attribution-Noncommercial-Share Alike

Unit 6 Reading 2: Evaluating Internet Material by Boundless <u>https://www.boundless.com/communications/textbooks/boundless-</u> <u>communications-textbook/topic-research-gathering-materials-and-evidence-</u> <u>8/internet-research-43/evaluating-internet-material-184-10644/</u>? Creative Commons Attribution-Noncommercial-Share Alike

## <u>4/16 R</u>

Unit 6 Reading 3: Finding the Good Argument; or Why Bother With Logic? <u>http://www.parlorpress.com/pdf/jones--finding-the-good-argument.pdf</u> CC

## <u>4/21 T</u>

Reminder of Unit 6 Online Activities: One Short Writing Assignment (Dropbox) One Unit Quiz

At least 2 Unit Discussion Topics due Wednesday 4/22 by 11:59pm Self-Assessments, Short Multiple Choice Ungraded for Practice within the Unit The Unit 6 Quiz (In the Quizzes Tool in Blazeview, under "Assessments,") and the Short Writing Assignment (in the "Dropbox") Must Be Completed by Wednesday 4/22 by 11:59pm)

4/23 R

Unit 7 Logic and Law

In Unit 7 we will evaluate how argumentation is used in legal contexts. We will consider sample LSAT examination questions, and we will address how logic is an integral part of law school training. We will look at resources for persuasive writing as they could apply to legal argumentation in written briefs and in litigation.

Objective:

Analyzing legal argumentation and sample LSAT questions, practicing persuasive writing and argumentation for litigation. Readings and Multimedia

There are three readings in Unit 7:

Unit 7 Reading 1: Logic for Law Students: How to Think Like a Lawyer <u>http://lawreview.law.pitt.edu/ojs/index.php/lawreview/article/view/117</u> CC BY Unit 7 Reading 2: Paralegal Alliance: The Law School Admissions Test "LSAT" – Arguments <u>http://www.paralegalalliance.com/the-law-school-</u> admissions-test-lsat-arguments/#axzz3GmtWGGvE CC BY

## <u>4/28 T</u>

Unit 7 Reading 3: Paralegal Alliance: Writing to Persuade <u>http://www.paralegalalliance.com/writing-to-</u> <u>persuade/#axzz3GmtWGGvE</u> CC BY

## <u>4/30 R</u>

Final Exam, in Quizzes Tool

At least 2 Unit Discussion Topics (to be completed by your section's final exam time, listed below)

Self-Assessments, Short Multiple Choice Ungraded for Practice within the Unit

The Final Exam (In the Quizzes Tool in Blazeview, under "Assessments,") Must Be Completed by the time and date listed below for your section of the course:

**FINAL EXAMINATION:** For classes that meet Tuesday-Thursday at 8am, the Registrar has determined that final exams will be **May 6**, **Wednesday**, at **10:15am**.

For classes that meet Tuesday-Thursday at 5pm, the Registrar has determined that final exams will be **May 7**, **Thursday**, **at 7:15pm**.

Our final exam will cover the last unit of our class, on applying logic in everyday contexts. It will be in Blazeview in the Quizzes area and must be completed by that time.

To look up your other classes' Fall final exams, see the online guide at the link to Registration at the university homepage:

http://www.valdosta.edu/academics/registrar/documents/spring-2015-finalexam-schedule.pdf

## Logic Short Summary of Graded Items

Date	Grade Item	Percentage of Final Grade	e In Class or Online	If Online, Location in Blazeview
	First Introduction Discussion,	5%	Online	Discussions Dropbox Quizzes

at 11:59pm	Dropbox and Practice Quiz in Blazeview					
Sunday	Unit 1 Quiz	10%	In Class	Assessments>Quizzes and		
1/25 by	and		and	Communication>Discussions		
11:59pm	Discussions		Online			
WednesdayUnit 2 Quiz		10%	In Class	Assessments>Quizzes and		
2/11 by and			and	Communication>Discussions		
11:59pm	Discussions		Online			
Wednesda		5%	In Class	Communication>Discussions		
2/25 by Discussions			and			
11:59pm			Online			
Wednesda	yMidterm,	10%	Online	Quizzes		
2/25 by	primarily					
11:59pm	focused on					
Unit 3 Material						
Thursday	The Logic	5%	Online	Discussion		
3/5 by	Арр					
11:59pm	screencap 1					
Thursday	The Logic	5%	Online	Discussion		
3/12 by	Арр					
11:59pm	screencap 2					
Tuesday	The Logic	5%	Online	Discussion		
3/17 by	Арр			Additional screencaps may		
11:59pm	screencap 3			be turned in through		
			• •	Dropbox for extra credit		
Thursday	Unit 4 Quiz	5%	Online	Quizzes		
3/19 by						
11:59pm		1.00/				
Thursday	Unit 5	10%	In Class	Assessments>Quizzes and		
4/9 by	Discussions		and	Communication>Discussions		
11:59pm	and Unit 5 Quiz		Online			
WednesdayUnit 6		10%	In Class	Assessments>Quizzes and		
4/22 by	Discussions		and	Communication>Discussions		
11:59pm	and Unit 6		Online			
	Quiz					
Your final	Final Exam	10% Unit 7		Assessments>Quizzes and		
due time	and Unit 7	Discussion	and	Communication>Discussions		
based on	Discussions	10% Final	Online			
section	Section A	Exam				

Wed 5/6 10:15am Section G Thurs 5/7 7:15pm

#### **Online Course Evaluations**

Student evaluations are extremely important in helping faculty members plan and revise their courses. Rather than completing these evaluations during class time, students will need to access evaluation forms via BANNER and complete them in a period during the last few weeks of class. Please take the time to complete this important evaluation (or opt out of providing an evaluation) during the designated period. Students will receive an email notification through their VSU (valdosta.edu) email address when the SOI is available (generally at least one week before the end of term.) SOI responses are anonymous to instructors/administrators. Instructors will be able to view only a summary of all responses two weeks after they have submitted final grades. While instructors will not be able to view individual responses or access any of the responses until after final grade submission, they will be able to see which students have or have not completed their SOIs, and student compliance may be considered in the determination of the final course grade. Some professors give extra credit for completing the SOI and some do not, please do not pressure any faculty member about giving extra credit - it's an individual instructor choice. These compliance and non-compliance reports will not be available once instructors are able to access the survey.