

$(p \vee \cdot \equiv \supset \sim \exists \phi \vee \quad \vee \cdot \equiv \supset \sim \exists \phi \vee q)$  Philosophy 110

## *Introduction to Logic*

Philosophy 110 Introduction to Logic

TR 0830-0945a AO 101 CRN 63007

TR 1130-1245p PALANA 213 CRN 63112

INSTRUCTOR: James Andy Stroble, PhD.

OFFICE: Palanakila 152

OFFICE HOURS: TR 10:00-11:30, or by appointment.

TELEPHONE: 236-9152 e-mail: stroble@hawaii.edu

EFFECTIVE DATE: Fall 2016

### Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

### CATALOGUE DESCRIPTION:

A study of the foundations and development of rational thought and communication and their applications. Includes analysis of deductive reasoning, formal and informal fallacies, and the use of symbolic systems.  
WCC: FS

### STUDENT LEARNING OUTCOMES:

At the completion of this course, you should be able to:

- Recognize fallacies of relevance, presumption, and and ambiguity.
- Employ rules of logic in deductive analysis.
- Construct truth tables for deductive analysis.
- Use symbolic systems for deductive analysis.

Students who successfully complete Philosophy 110 will have learned the principles of accurate thinking. They will know how to acquire reliable information and how to evaluate competing claims. Students who do not, well, they will be wandering into a morass competing claims to truth, with no means of sorting out the truth from the appearances.

### COURSE TASKS

- READ the assigned parts of the textbook, before class.
- Attend class!
- Homework exercises: Logic is like a language, or music, you must practice to learn. Homework due on Thursdays.
- Quizzes: Take the quizzes, make them up if you miss one. Quizzes are on Thursdays.
- Take Exams: We have lots of them, so we can practice.

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### METHOD OF GRADING:

Grading will be based on a percentage scores on **weekly** quizzes, three mid-term exams, and a final exam, and percentage of attempted or completed homework assignments, with the following weights:

- Homework: 10%
- Quiz average: 20%
- Mid-term exams: 30% (or, 10% each)
- Final exam: 40%

Letter grades will be assigned on an approximate curve, depending upon the range of final total percentages.

### LEARNING RESOURCES AND MATERIALS:

Textbook: *Logic*, Third Edition, by Stan Baronett. Available in the Bookstore.  
Study guides and other materials will be made available on Laulima

### **Important Registration and Withdrawal Deadline Information**

08/26/2016 Last day to register

08/26/2016 Last day to receive 100% tuition refund

09/12/2016 Last day to receive 50% tuition refund

09/12/2016 Last day to drop (No "W" on transcript)

11/03/2016 Last day to withdraw from class ("W" on transcript)

## Schedule

(as of August 19, 2016, subject to change, modification and/or disruption)

### **Week One**

August 23-25: Introductions, What Logic is.

**Reading:** Chapter One, Sections A-C .

**Homework:** Exercises 1B.1 #1-10, 1B.2 # 2-4, 1C #3, 5, 10, 12. Quiz on Thursday, last 10 minutes of class.

\*\*\* \*08/26/2016 Friday: Last day to Add/Late Register

### **Week Two**

Aug. 30- : Validity, Deduction and Induction

**Reading:** Chapter One, Sections D-G

**Homework:** Exercises 1E #2-9, 1F #3, 5, 7.

### **Week Three**

Sept. 6: Fallacies! *Defense Against the Dark Arts!*

**Reading:** Chapter Four, the whole thing!

**Homework:** Exercises 4A.II, # 6, 11, 16, 19. 4B.II # 12, 17. 4C.I #2, 8. 4C.II #3, 8, 16. 4D, pick one!

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**Week Four**

Sept. 13: Propositional Logic

Reading: Chapter Seven, Sections A-B; Logical Operators and Translation

**Homework: Exercises 7A, # 1-15, 7B.I, #1-10.**

**\*\*Monday, Sep 12, 2016 : Last day to withdraw with 50% tuition refund, to drop without a "W".**

**Week Five**

Sept. 20: Truth Functions and Truth Tables

Reading: Chapter Seven, Sections C-D

**Homework: Exercises 7C #1, 2,3,5,8,11,16, 17, 19. 7D.I #2-6.**

**Week Six** Kinds of Statements

Sept. 27: Reading: Chapter Seven, Sections E-G

**Homework: Exercises 7D2.I #2-5, 7D2.II # 1-5, 7E #9-16, 7F # 2-10.**

**\*\*First Mid-term Exam, Sept. 29, 20 minutes.**

**Week Seven**

Oct. 4 : Validity and Truth Tables

Reading: Chapter Seven, sections G-I

**Homework: Exercises 7G # 2-8, 7H.I #3, 4; 7H.II #2, 3, 4; 7I.1 # 5, 10; 7I.2 # 2, 3, 7.**

**Week Eight**

Oct. 11: **Natural Deduction**

Reading: Chapter Eight, sections A-B

**Homework: Exercises 8B.I # 1-10, 8B.II #1-7**

**Week Nine**

Oct. 18: **Natural Deduction:**

Reading: Chapter Eight, Section C

**Homework: Exercises 8B.III # 3-6, 8B.IV # 2-4. 8C.I # 4, 8, 8C.II # 7.**

**Week Ten**

Oct. 25: Deduction **Replacement Rules**

Reading: Chapter Eight, Section D

**Homework: Exercises 8D.I #2-6, 8D.II #2, 8, 9, 8D.III #3, 9, 18.**

**\*\*Middle Mid-term examination: Oct. 27, 25 minutes.**

**Week Eleven**

Nov. 1: Rules of Replacement

Reading: Chapter Eight, Section E

**Homework: Exercises 8E.I # 2-6, 8E.II #5, 9, 11, 8E.III #5,**

**\*\*\*\*Nov 3, 2016: Last Day to Withdraw (at all). Point of no-return!**

**Week Twelve**

Nov. 8 : More on the Method of Deduction

Reading: Chapter Eight, Section F

**Homework: Exercises 8F.I #2-6, 8F.II #2-6, 8F.III #2, 5, 11**

**\*\*Third Mid-Term Exam, Nov. 10, 30 minutes.**

**Week Thirteen**

Nov. 15: Indirect Proofs

Reading: Chapter Eight, Sections G, H: Conditional and Indirect Proof

**Homework: Exercises 8G.I #5, 8H.I # 5, 12, 8H.II # 2, 3.**

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**Week Fourteen**

Nov. 22: Predicate Logic

Reading: Chapter 9A, B

**Homework: Exercises 9A # 1-10**

**November 24 is Thanksgiving Day: NO CLASS (and Friday, November 25)**

**Week Fifteen**

Nov. 29 : Subject-Predicate Propositions

Reading: Chapter 9C

**Homework: Exercises 9B.I # 3, 9B.II #2, 9B.III #5**

**Week Sixteen**

**Dec. 6-8:** Last week of class. Reading: Nothing? Exercises: To Be Announced

**\*\*Final Exams:**

**CRN 63007: Thursday, December 15, 8:30 to 10:30am**

**CRN 63112: Thursday, December 15 11:30am to 1:30pm**

**DISABILITIES ACCOMMODATION STATEMENT**

*If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, [lemke@hawaii.edu](mailto:lemke@hawaii.edu), or you may stop by Hale 'Akoakoa 213 for more information.*