

PHIL 111 Introduction to Inductive Logic

3 Credits

MW 1:00-2:15 p.m. in Palanakila 212 (CRN - 60388)

INSTRUCTOR: Steven Stegeman, Ph.D.

OFFICE: Palanakila 152

OFFICE HOURS: Monday 11:30 - 12:30 p.m. or by appointment

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EFFECTIVE DATE: Spring 2019

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.

CATALOG DESCRIPTION

Introduction to the theory of arguments based on probabilities and to the theory of decision-making in the context of uncertainty. *This class fulfills Windward CC's "FQ" general education requirement.*

Activities Required at Scheduled Times Other Than Class Times

- Extra-credit sessions will get scheduled. They will be interspersed throughout the semester as needed and scheduled as conveniently for all as possible. However, these sessions will be recorded and made available via Lualima and so will not be mandatory, though all students will be responsible for the content covered during these sessions. (For more, see "Course Tasks" section below.)
- Also, since all tests for this class, including the final one, are administered via Lualima, the meeting time scheduled week 17, that is, final-exam week will be used for a final culminating class for which bonus similar to an extra-credit session (explained above) will be awarded.

FOUNDATIONS HALLMARKS

To satisfy the Quantitative Reasoning "FQ" requirement, the course will:

1. Provide students with theoretical justifications for, and limitations of, mathematical or statistical methods, and the formulas, tools, or approaches used in the course.
2. Include application of abstract or theoretical ideas and information to the solution of practical quantitative reasoning problems arising in pure and applied research in specific disciplines, professional settings, and/or daily and civic life.
3. Provide opportunities for practice and feedback that are designed to help students evaluate and improve quantitative reasoning skills by including a course component at least once per week with a maximum 30:1 student-to-teacher ratio.
4. Be designed so that students will be able to:
 - a. Identify and convert relevant quantitative information into various forms such as equations, graphs, diagrams, tables, and/or words;
 - b. Select appropriate techniques or formulas, and articulate and evaluate assumptions of the selected approaches;

- c. Apply mathematical tools and perform calculations (including correct manipulation of formulas);
- d. Make judgments, create logical arguments, and/or draw appropriate conclusions based on the quantitative analysis of data, the assumptions made, the limitations of the analysis, and/or the reasonableness of results; and
- e. Effectively communicate those results in a variety of appropriate formats.

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course are:

1. Correctly classify data and variables.
2. Create and interpret various graphs.
3. Calculate and interpret descriptive statistics, including the mean, median, and mode.
4. Construct and interpret point and interval estimates.

COURSE TASKS

Instructor's Detailed Course Description:

The students will explore inductive analytics, the study of the fundamental structures and aspects of cogent inference-making and logical implication in an inductive framework. This will include, but not be limited to, the study of topics such as standard deviation, probability theories, probability calculus, Bayes's Rule, Mill's Methods, axiological judgments and informal fallacies.

Grade Scale: 90 or higher = A; 80-89 = B; 70-79 = C; 60-69 = D. Below 60 is a failing grade.

Grading Policy: Four/Five Tests worth 65% total + Homework/Classwork worth 35% total = 100%

- Tests will be timed take-home tests administered through Laulima.

A 12+% BONUS toward the final grade is available via the "Book, Homework, Attendance & Extra-credit Session Bonuses"!

- "Book Bonus" – Procure the *correct edition* of the assigned textbook; get 2 bonus points toward your final grade!
- "Homework Bonus" – Submit ALL homework ON TIME, *in the requested format*, at a *passing* level; get 4 bonus points toward your final grade! Miss one; get 2 bonus points!
- There are 6 "Attendance Bonus" points available; see the "Attendance Policy" below...
- Extra-credit sessions will get scheduled. They will be interspersed throughout the semester as needed. At least 1 bonus point will be awarded for attending such a session (alternatively, attending these can be substituted with tutoring sessions at the LRC). These sessions will be recorded and made available via Laulima and so attendance will not be mandatory, though all students will be responsible for the content covered during these sessions.

Attendance Policy:

Students should miss no more than eight classes. Upon a ninth absence a student should receive an F. Tardies will be dealt with on a case-by-case basis.

- "Attendance Bonus" – Attendance will be used to award bonus points towards a student's final grade. Up to 6 bonus percentage points can be earned via the "Attendance Bonus". They will be awarded as follows: 0 absences - 6 bonus points; 1 absence - 4 points; 2 absences - 2!!! However, as these are bonus points, excused absences will NOT be taken into account.

LEARNING RESOURCES

Required Texts & Readings:

Baronett, Stan. *Logic – Third Edition*, New York, New York: Oxford University Press, 2016 (ISBN-10: 0199383405).

Recommended/Further Texts & Readings:

Hacking, Ian. *An Introduction to Probability and Inductive Logic*, New York, New York: Cambridge University Press, 2001 (ISBN-10: 0521775019).

COURSE SCHEDULE

**** Before making any kind of recording of the class, please get the instructor's permission! ****

Week	Weekly Planner (subject to adjustment)
1	Chapter 1 Reading: Intro. & Sections B, E, G
2	Chapter 1 Continued
3	Chapter 1 Continued
4	Chapter 1 Continued Test #1 focusing on what we covered in relation to Chapter 1 due/administered Chapter 14 Reading: Intro. & Sections A, B, C
5	Chapter 14 Continued
6	Chapter 14 Continued
7	Chapter 13 Reading: Intro. & Section A
8	Chapter 13 Continued Test #2 focusing on what we covered in relation to Chapters 14 through 13.A due/administered
9	Chapter 13 Reading: Intro. & Sections B, C, D, F, G, H, I
10	Chapter 13 Continued
11	Chapter 13 Continued
12	Chapter 13 Continued
13	Chapter 13 Continued
14	Chapter 13 Continued
15	Test #3 focusing on what we covered in relation to Chapter 13.B through I due/administered Chapter 4 Reading: Intro. & Sections A, B, C, D, E
16	Chapters 4 Continued
17	Chapters 4 Continued *NOTE that, since all tests for this class, including the final one, are administered via Laulima, the meeting time scheduled for final-exam week will be used for a final culminating class for which bonus similar to an extra-credit session (explained above) will be awarded. Test #4 focusing on what we covered in relation to Chapter 4 due/ administered

DISABILITIES ACCOMMODATIONS

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, or you may stop by Hale 'Ākoakoa 213 for more information.

TITLE IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual

orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235- 7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235- 7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator, Karla K. Silva-Park, at 808-235-7468 or karlas@hawaii.edu.

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alakai 121

Phone: 808-235-7422

Email: wccaa@hawaii.edu