

COURSE SYLLABUS

Anthropological Statistical Analysis (ANTH 438)

COURSE DESCRIPTION

This course is an introduction to basic principles of statistics as applied to the analysis of anthropological data. It teaches students how to analyze and interpret socio-cultural information using statistical techniques for measuring and comparing the level, spread, and dispersion of batches of numbers, using samples to represent an unknown universe, and comparing categorical and numerical variables through common statistical techniques such as ANOVAS, Chi-Square tests, and linear regressions, among others.

COURSE OBJECTIVES

Throughout the semester we will be working towards achieving various class goals. By the end of this course, you will be able to:

1. Understand important statistical principles and how they can best be applied to the social sciences.
2. Use statistical analyses to understand and explain socio-cultural phenomena.
3. Be able to assess and be critical of the use of specific statistical approaches and techniques in the academic literature and professional settings.

TOPICAL OUTLINE OF COURSE

	Date	Topic	Readings due
Week 1	Jan 21	NO CLASS	
	Jan 23	Batches of Numbers	Module 1
	Jan 25	--Lab	
Week 2	Jan 28	The Level or Center of the Batch	Module 2
	Jan 30	--Lab	
	Feb 1	--Lab	
Week 3	Feb 4	The Spread or Dispersion of the Batch	Module 3
	Feb 6	--Lab	
	Feb 8	--Lab	
Week 4	Feb 11	Comparing Batches	Module 4
	Feb 13	--Lab	
	Feb 15	--Lab	
Week 5	Feb 18	The Shape or Distribution of a Batch	Module 5
	Feb 20	--Lab	

	Feb 22	--Lab	
Week 6	Feb 25	Categories	Module 6
	Feb 27	--Lab	
	March 1	--Lab	
Week 7	March 4	Samples and Populations	Module 7
	March 6	Different Samples from the Same Population	Module 8
	March 8	--Lab	
	March 11	NO CLASS	NO CLASS
	March 13	NO CLASS	NO CLASS
	March 15	NO CLASS	NO CLASS
Week 8	March 18	Confidence and Population Means	Module 9
	March 20	--Lab	
	March 22	--Lab	
Week 9	March 25	Medians and Resampling	Module 10
	March 27	Categories and Population Proportions	Module 11
	March 29	--Lab	
Week 10	April 1	Comparing Two Sample Means	Module 12
	April 3	--Lab	
	April 5	--Lab	
Week 11	April 8	Comparing the Means of more than Two Samples	Module 13
	April 10	--Lab	
	April 12	--Lab	
Week 12	April 15	Comparing Proportions of Different Samples	Module 14
	April 17	--Lab	
	April 19	--Lab	
Week 13	April 22	Relating a Measurement Variable to Another Measurement Variable	Module 15
	April 24	--Lab	
	April 26	--Lab	
Week 14	April 29	--Lab	
	May 1	Relating Rank	Module 16
	May 3	--Lab	

FINALS	May 6	-- FINAL	
	May 8	FINAL	
	May 10	FINAL	

METHODS OF EVALUATION

- 1) Weekly exercises (10% each).....60%
- 2) Final Exam.....40%

Reading assignments for each module are on the schedule (above).

Grades will be based on weekly exercises (60%) and a final exam (40%). The final will have an in-class section and a take-home section. The weekly exercises are essential, and it is important not to fall behind on them.

Extra Credit

There is no extra credit available in this course.

GRADING SCALE

The following grading scale is utilized for student evaluation:

- A 90% and above
- B 80-89%
- C 70-79%
- D 60-69%
- F 59% and below