SOCS 225 Statistics for the Social Sciences 3 Credits MW 7 – 8.15 p.m.

INSTRUCTOR: Lisamarie Bensman, Ph.D. OFFICE: New Na'auao 122 OFFICE HOURS: MW 2.30 – 4 p.m., MW 6 – 7 p.m., TR 2.30 – 3 p.m., & by appointment EMAIL: <u>bensman@hawaii.edu</u> 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.

CATALOG DESCRIPTION

This course covers statistical methods related to behavioral sciences including frequency distributions, graphic methods, central tendency, variability, correlation, reliability, and tests of significance. (3 hours lecture).

Pre-Requisite(s): Credit in a 100-level (or above) Social Science course, placement into English 100, and placement into Math 103 or higher; or consent of instructor.

Activities Required at Scheduled Times Other than Class Times

For this course, in addition to attending class, you are expected to complete a number of assignments outside of class time, including reading the textbook, homework assignments, studying for quizzes, and a project.

STUDENT LEARNING OUTCOMES

Upon completion of the course, the student will be able to:

- Use descriptive and inferential statistics to summarize and analyze raw data.
- Present statistical data in graphs and tables.
- Use statistical formulas to investigate the relationships among variables, including central tendency, correlations, and percentages.
- Use t-test, f-test, and z-test to test hypotheses and statistical significance.

COURSE TASKS.

In addition to our face-to-face lectures, we will use Laulima throughout the semester. Laulima is WCC's online course management system, which you might have used in previous courses. On Laulima, you will find our official class gradebook, a resource folder containing important class materials (such as class PPs, data sets, and assignment instruction sheets), class announcements, and our syllabus along with a number of other useful items. Access to Laulima requires your regular school username and password.

Required Readings & Materials: This class is very hands-on, but we will still have to do some reading. Our text is open-source: Open**Stax** College (2013). *Introductory Statistics*. Houston, TX: Author.

Use can access a free .pdf version of the using this link: <u>https://openstaxcollege.org/textbooks/introductory-statistics/get</u>

Additionally, we will work extensively with SPSS, a statistical computer program. While the program is available for use during class on departmental laptops, I highly recommend purchasing a copy for your personal computer as you will need to use SPSS for homework.

A 6 month SPSS license can be purchased using the link below. You want SPSS Statistics Standard GradPack 24.

PC users:

<u>https://estore.onthehub.com/WebStore/OfferingDetails.aspx?o=aacdf707-9feb-e511-9417-b8ca3a5db7a1&pmv=00000000-0000-0000-0000-000000000000</u>

Mac users:

We will use SPSS Statistics Standard GradPack 23 in class. Older versions of the program should be okay, although your program may not match our class screen and/or PowerPoints perfectly.

PowerPoints for the course, along with homework assignments, are available on the class website. Readings are *essential* to keeping up in this class; without the readings, you will likely be lost during our lectures and hands-on computer work.

PowerPoint Slides: Lecture slides are posted on the course website

(<u>https://laulima.hawaii.edu/portal</u>). These PowerPoints are to supplement your own note-taking, not replace it. The posted PPs do not contain all the information we cover in class, but they are a great place to start taking your own lecture notes.

Coursework: Statistics are a set of skills and tools that you will learn to employ when needed. As such, you are graded based on how well you can use said tools. You have many opportunities to demonstrate your ability to utilize these tools using a variety of different formats:

Homework:	$6 \ge 10 \text{ points} = 60 \text{ points}$
Quizzes:	$5 \ge 10$ points = 50 points
Statistics Binder:	$1 \ge 15$ points = 15 points
Project:	$1 \ge 25$ points = 25 points
	TOTAL = 150 points

Homework: Our class is very hands on. The best way to learn statistics is to DO THEM. During class we will work with SPSS and you will continue to work with SPSS for your homework assignments. Assignments are each worth 10 points and will be graded on completion, understanding of the material, and accuracy of presentation. Assignments should be typed and submitted as hard copies. Late assignments are not accepted.

A large part of mastering statistics is to keep using them. Almost no one understands statistics the first time through a technique (or even the second or third). To encourage you to keep practicing, you may revise and re-submit each homework assignment once. Resubmissions are due within one week of the homework being returned; for example, if assignment 1 was returned on Monday, Sept. 12th, your revision would be due by Monday, Sept. 19th. Revisions are optional and can only be submitted if you turned in the original assignment. Assignments will be regraded using the same criteria and your revised grade with be the average of the original grade and the revision; for example, if the original score on assignment 1 was a 7/10 and the revised assignment 1 was a 10/10, your final score for assignment 1 would be 8.5/10.

Quizzes: We have 6 quizzes. Each quiz is worth 10 points and I drop your lowest quiz grade. These quizzes are practical tests of your knowledge and cover basic & applied knowledge of statistical concepts. These quizzes are open-book, open-notes but must be entirely your own work. Similar to the homework assignments, you will use SPSS for the quizzes.

As with the homework, practice makes perfect. With this in mind, you may revise and re-submit each quiz once. Resubmission procedures mirror those used for the homework (resubmissions are due within one week of the quiz being returned and assignments will be regraded using the same criteria and your final grade will be the average of the original grade and the revision).

Statistics Binder: Throughout the semester, you will be creating your own stats reference book. All your completed & graded homework, quizzes, class PowerPoints, class notes, and class exercises should be contained in this stats binder. The binder should be neatly organized by topic. After the semester, this notebook will serve as your very own stats reference book. You will submit your binder towards the end of the semester. It is worth 15 points. After grading, you should retrieve your notebook and (hopefully) use your personalized stats survival guide for future classes.

Binders may be either digital or hard copy, provided the entire binder is in the same format (i.e. you can't have some items in digital format and other in hard copy). For a digital binder, items must all be downloaded or scanned/uploaded into a centralized location that is only for SOCS 225 (such as a file folder).

Project: For your final project in this course you will formulate an appropriate research question using approved data, perform descriptive statistics, conduct an appropriate analyses using SPSS, and write up a results section based on your findings in APA style. More information about this project will be handed out later in the semester. It is worth 25 points.

Attendance Policy: Attendance does not count towards your statistics grade, however homework must be turned in by the day that it is due. If you are absent on that day, you should make alternative arrangements for work to be turned in regardless. The same goes for our quizzes.

COURSE CONTENT

Topic	Dates	Assignment
Introduction to the course	Aug. 22 nd	
Basic Concepts Variables, Measurement, & Frequency	Aug. 24 th , 29 th , 31 st , & Sept. 7 th Homework #1	Read: Ch. 1 & 2 Due Sept. 7th
Quiz #1 Cleaning & Preparing Data	Sept. 12 th Sept. 12 th	
Probability & Central Limit Theorem	Sept. 14 th , 19 th , 21 st , & 26 th Homework #2	Read: Ch. 3, 6, & 7 Due. Sept. 26th
Quiz #2	Sept. 28 th	
Measures of Association Cross Tabs, Chi-Square, & Correlations	Oct. 3 rd , 5 th , 10 th , & 12 th Homework #3	Read: Ch. 11 Due Oct. 12 th
Quiz #3	Oct. 17 th	
Regression Linear & Multiple	Oct. 19 th , 24 th , 26 th , & 31 st Homework #4	Read: Ch. 12 Due Oct. 31 st
Quiz #4	Nov. 2 nd	
Hypothesis Testing T-Tests	Nov. 7 th & 9 th Homework #5	Read: Ch. 9 & 10 Due Nov. 9 th
Quiz #5	Nov. 14 th	
Hypothesis Testing	Nov. 16 th , 21 st , & 23 rd Read Homework #6	: Ch. 13 Due Nov. 23 rd
Quiz #6 Charts & Graphs	Nov. 28 th Nov. 28 th	
Project Work Days	Nov. 30 th , Dec. 5 th , & 7 th	Binder due Dec. 7 th
Project Fair	Dec. 12 th , 7 – 9 p.m. regular classroom	Project Due

Schedule (tentative and subject to change):

• Readings should be completed prior to the start of the class period for which they are assigned.

- Homework is due by the end of class on the day that it is due. Hard copies only.
- Quizzes will take place after we have completed a general review of the homework on the topic (your specific, submitted homework may not have been returned yet).

ASSESSMENT TASKS AND GRADING

Rubrics for each assignment are available on Laulima.

Students often worry about their progress in a course, and sometimes ask their instructors to calculate their grade for them. In this course, my goal for the grading system is to be as clear as possible so that you are always aware of your standing in the course. I have provided this worksheet for you to fill in your assignment grades as the semester progresses.

Requirement	Points Earned	Points Possible
Homework # 1		10
Homework # 2		10
Homework # 3		10
Homework # 4		10
Homework # 5		10
Homework # 6		10
Quiz # 1*		10
Quiz # 2*		10
Quiz # 3*		10
Quiz # 4*		10
Quiz # 5*		10
Quiz # 6*		10
Statistics Notebook		15
Project		25
Total:		/150

* remember to only count your highest 5 quiz grades in your final point total

Grading:

I will use the following scale to determine your final grades:

		e	2	0
А	=	150.0 – 135 points	[percentage	of 90 – 100%]
В	=	134.9 - 120 points	[percentage	of 80 – 89.9%]
С	=	119.9 – 105 points	[percentage	of 70 – 79.9%]
D	=	104.9 - 90 points	[percentage	of 60 – 69.9%]
F	=	Below 90 points [p	ercentage of	0 – 59.9%]

LEARNING RESOURCES

Our required materials for the course: Open**Stax** College (2013). *Introductory Statistics*. Houston, TX: Author.

Additional course materials will be available on Laulima.

Recommended Reading Resources:

American Psychological Association. (2002). *Publication manual of the American Psychological Association, (5th ed.)*. Washington DC: Author. (In Reference Section of WCC Library or at Reference Librarian's desk. Call number: BF76.7.P83 2001)

Frankfort-Nachmias, C., & Leon-Guerrero, A. (2014). *Social Statistics for a Diverse Society* (7th Edition). Los Angeles, CA: Sage.

Field, A. (2013). *Discovering Statistics using IBM SPSS Statistics* (4th Edition). Los Angeles, CA: Sage.

Campus Resources:

TRIO: Tutoring and resource center for low-income, first-generation, and/or students with disabilities.

Peer Mentoring: tutoring and mentoring for any student in need of tutoring or educational support (see your campus counselor at Student Services).

TTC: The Testing Center for assistance in an alternative testing site.

Library Study Services: See the librarian for additional details.

EBSCOHost Journal Online DataBase can be accessed through the Library Website: http://library.wcc.hawaii.edu

Additional Information

- I am here to help you succeed in this course. Please don't hesitate to email me or stop by my office if you have any questions, concerns, or problems.
- Attendance: Attendance does not count towards your statistics grade, however homework and quizzes must be turned in by the day that they are due. If you are absent on that day, you should make alternative arrangements for work to be turned in regardless. There will be in class lab exercises, but missed lab exercises may be completed at a later date.
- Plagiarism/Cheating: I take both plagiarism and cheating very seriously. If I believe you have plagiarized (intentionally or unintentionally) or cheated, you will earn a zero for that assignment, no exceptions. A second instance of either will result in failure of the course (i.e. two instances of plagiarism, two instances of cheating or an instance of plagiarism and an instance of cheating).
- Late assignments: Late assignments will not be accepted, excepted in cases of serious documented emergencies. This determination is made by me; please contact me as soon as you anticipate a problem
- Assignment submission: Assignments should be submitted as hard copies. Electronic copies will be accepted only as a last resort. If you need to email me an assignment, it is your responsibility to ensure that the proper document was received on time. I will send a confirmation email indicating that the file was received. If the file is late or does not open properly, it will not be counted as on-time and you will not receive credit for the assignment. Given the potential for errors with electronic submissions, I strongly recommended that you do not submit assignments electronically.
- Course format: Class sessions will involve a combination of student driven lectures, professor driven lectures and in-class activities. Students are expected to complete assigned readings and activities before coming to class. Active participation during class is expected and will provide students with a deeper and more complete understanding of

psychological principles. Failure to prepare or participate will not directly impact your grade (i.e. you will not lose points for not participating) but is likely to indirectly impact your grade (i.e. students who participate actively are more likely than non-participants to comprehend the material and therefore do better on the exams).

• I strongly uphold the University of Hawai'i's non-discrimination policy in my class. Any discriminatory acts or language on the basis of race, religion, sex, age, national origin, ancestry, disability, or sexual orientation will NOT be tolerated. We will maintain our classroom as a safe environment for all.

MySuccess

At Windward Community College, we want every student to be successful. To help with this, early intervention will be offered through MySuccess. MySuccess is a system wide effort that seeks to support students early in the semester when they first begin experiencing difficulty in class. If I feel that you're having difficulty in our class within the first few weeks of the semester (e.g. missing assignments or low assignment scores) and working together shows that you would really benefit from being connected to supportive resources outside of the classroom, I may refer you to an assigned counselor. Once referred, MySuccess will:

- Call you and send an email to your <u>Hawaii.edu</u> account to let you know about my referral; and
- Have a Counselor follow up with you by phone or by email to find out what kinds of help you might need and connect you with the necessary resources to help you devise a strategy for success.

I will not refer you without telling you. If I do refer you, know that I am doing so in an effort to connect you with all of the help you may need to do well this semester as your success is important to me.

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, <u>lemke@hawaii.edu</u>, or you may stop by Hale 'Akoakoa 213 for more information.