SOCS 225 Statistics for the Social Sciences (CRN: 60149)

3 Credits
MW 11.30 a.m. – 12.45 p.m.

Instructor: Lisamarie Bensman, Ph.D.
Email: bensman@hawaii.edu
Office: Naʻauao 114
Office Hours: In-person (drop-in, no appointment needed) MW 1 – 2.30 p.m.
Online (via Skype & email) T 2 – 3 p.m. & R 9 – 10 a.m.
I’m also available by appointment both in-person & online
Email is an excellent way to get a hold of me; email me anytime

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.

OUR COURSE
Welcome! Nothing is more essential to understanding and analyzing social science research than a firm grasp of statistical techniques. This class will draw on journal articles, lectures, and practical experience to provide you with a “toolbox” of statistical techniques to help you to approach, answer, and analyze research- in both the social sciences and your everyday life! We will discuss basic statistical premises in an applied research context with a heavy emphasis on practical application and PSPP.

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. DS (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, you will be able to:

1. Use descriptive and inferential statistics to summarize and analyze raw data.
2. Present statistical data in graphs and tables.
3. Use statistical formulas to investigate the relationships among variables, including central tendency, correlations, and percentages.
4. 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: OpenStax College (2013). Introductory Statistics. Houston, TX: Author.

Use can access a free .pdf version of the using this link:
https://openstaxcollege.org/textbooks/introductory-statistics/get
Additionally, we will work extensively with PSPP, a freeware statistical computer program, (https://www.gnu.org/software/pspp/). While the program is available for use during class on departmental laptops, I highly recommend downloading a copy for your personal computer as you will need to use PSPP for homework.

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 (https://laulima.hawaii.edu/portal). 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 x 10 points = 60 points
- **Quizzes:** 5 x 10 points = 50 points
- **Statistics Binder:** 1 x 15 points = 15 points
- **Project:** 1 x 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 PSPP and you will continue to work with PSPP 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. 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, Jan. 14th, your revision would be due by Monday, Jan. 21st. 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 will 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. Similar to the homework assignments, you will use PSPP 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. Binders may be either digital or hardcopy (or a combination of part digital, part hardcopy). 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.

**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

### Schedule (tentative and subject to change):

<table>
<thead>
<tr>
<th>Topic</th>
<th>Dates</th>
<th>Assignment</th>
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<tbody>
<tr>
<td><strong>Introduction to the course</strong></td>
<td>Jan. 7&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td><strong>Basic Concepts</strong></td>
<td>Jan. 9&lt;sup&gt;th&lt;/sup&gt;, 14&lt;sup&gt;th&lt;/sup&gt;, 16&lt;sup&gt;th&lt;/sup&gt;, 23&lt;sup&gt;rd&lt;/sup&gt;, &amp; 28&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Read: Ch. 1 &amp; 2, Homework #1, Due Jan. 28&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td><strong>Variables, Measurement, &amp; Frequency</strong></td>
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<td><strong>No School</strong></td>
<td>Jan. 21&lt;sup&gt;st&lt;/sup&gt;</td>
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<td><strong>Quiz #1</strong></td>
<td>Jan. 30&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>Probability &amp; Central Limit Theorem</strong></td>
<td>Feb. 4&lt;sup&gt;th&lt;/sup&gt;, 6&lt;sup&gt;th&lt;/sup&gt;, 11&lt;sup&gt;th&lt;/sup&gt;, &amp; 13&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Read: Ch. 3, 6, &amp; 7, Homework #2, Due Feb. 13&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>No School</strong></td>
<td>Feb. 18&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>Project Prep Day</strong></td>
<td>Feb 20&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Project planning form &amp; two articles, Due: Feb. 25&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>Quiz #2</strong></td>
<td>Feb. 25&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>Measures of Association</strong></td>
<td>Feb. 27&lt;sup&gt;th&lt;/sup&gt;, March 4&lt;sup&gt;th&lt;/sup&gt;, 6&lt;sup&gt;th&lt;/sup&gt;, &amp; 11&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Read: Ch. 11, Homework #3, Due March 11&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>Cross Tabs, Chi-Square, &amp; Correlations</strong></td>
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<td><strong>Quiz #3</strong></td>
<td>March 13&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>Regression</strong></td>
<td>March 25&lt;sup&gt;th&lt;/sup&gt; &amp; 27&lt;sup&gt;th&lt;/sup&gt;, April 1&lt;sup&gt;st&lt;/sup&gt; &amp; 3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Read: Ch. 12, Homework #4, Due April 3&lt;sup&gt;rd&lt;/sup&gt;</td>
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<td><strong>Linear &amp; Multiple</strong></td>
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<td><strong>Quiz #4</strong></td>
<td>April 8&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>Hypothesis Testing</strong></td>
<td>April 10&lt;sup&gt;th&lt;/sup&gt; &amp; 15&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Read: Ch. 9 &amp; 10, Homework #5, Due April 15&lt;sup&gt;th&lt;/sup&gt;</td>
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<td><strong>T-Tests</strong></td>
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<td><strong>Quiz #5</strong></td>
<td>April 17&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td><strong>Hypothesis Testing</strong></td>
<td>April 17&lt;sup&gt;th&lt;/sup&gt; &amp; 22&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Read: Ch. 13, Homework #6, Due April 22&lt;sup&gt;nd&lt;/sup&gt;</td>
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<td><strong>ANOVA</strong></td>
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<td><strong>Quiz #6</strong></td>
<td>April 24&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td><strong>Project Work Days</strong></td>
<td>April 29&lt;sup&gt;th&lt;/sup&gt; &amp; May 1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Binder due May 1&lt;sup&gt;st&lt;/sup&gt;</td>
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<tr>
<td><strong>Project Fair</strong></td>
<td>May 8&lt;sup&gt;th&lt;/sup&gt;, 11.30 a.m. – 1.30 p.m.</td>
<td>Project Due</td>
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- 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 (with a grace period until 11:59 p.m.). 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.

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<thead>
<tr>
<th>Requirement</th>
<th>Points Earned</th>
<th>Points Possible</th>
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<tbody>
<tr>
<td>Homework # 1</td>
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<td>Homework # 2</td>
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<td>Homework # 3</td>
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<td>Homework # 4</td>
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<td>Homework # 5</td>
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<td>Homework # 6</td>
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<td>Quiz # 1*</td>
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<td>Quiz # 5*</td>
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<td>Quiz # 6*</td>
<td>10</td>
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<tr>
<td>Statistics Notebook</td>
<td>15</td>
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<td>Project</td>
<td>25</td>
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<td><strong>Total:</strong></td>
<td>/150</td>
<td>= _____%</td>
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*remember to only count your highest 5 quiz grades in your final point total*

**Grading:**
I will use the following scale to determine the final grade that you earned:

- **A** = 150.0 – 135 points [percentage of 90 – 100%]
- **B** = 134.9 – 120 points [percentage of 80 – 89.9%]
- **C** = 119.9 – 105 points [percentage of 70 – 79.9%]
- **D** = 104.9 – 90 points [percentage of 60 – 69.9%]
- **F** = Below 90 points [percentage of 0 – 59.9%]

**LEARNING RESOURCES**
Our required materials for the course:

Additional course materials will be available on Laulima.
**Recommended Reading Resources:**


**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).

The University of Hawaiʻi Community Colleges offers free online, on-demand tutoring, through [https://windward.hawaii.edu/tutor.com/](https://windward.hawaii.edu/tutor.com/). Sign in to [MyUH.hawaii.edu](http://myuh.hawaii.edu) for access to Tutor.com.

Library Study Services: Our librarians are amazing and can help with oh so much. Please see the librarians for additional details.

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

**Student Resources:**
Ka Piko is WCC’s academic support hub. Please visit: [https://windward.hawaii.edu/kapiko/](https://windward.hawaii.edu/kapiko/)

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**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. At any point in the semester, if you have concerns about our class that you would prefer not to discuss with me, the Social Sciences
In order to keep class fair for everyone, we will adhere strongly to the following course policies:

1. **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).

2. **Late work policy:** Late assignments are not accepted, excepted in cases of serious documented emergencies with written verification of the extenuating medical, legal, or other qualifying circumstances. The determination of a qualified emergency is made by me; please contact me as soon as you anticipate a problem.

3. **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, gender, age, national origin, ancestry, disability, or sexual orientation will NOT be tolerated. We will maintain our online classroom as a safe environment for all.

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**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 Hawaii.edu 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, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 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, WCC has resources to support you. To speak with someone confidentially, contact the Mental Health & Wellness Office at 808-235-7393 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 me or experience any issues with class that you’d prefer not to discuss with me, please contact the Academic Affairs Office:

Location: Alakai 121  
Phone: 808-235-7422  
Email: wccaa@hawaii.edu