



Math 115 (Introduction to Statistics and Probability) Syllabus

(Credits: 3 / CRN#: 60176 & 60454 / Mode: Online - Asynchronous / Semester: Fall 2021)

Instructor: Navtej (Johnny) Singh || Office Location: Manaopono 110

E-Mail: navtej@hawaii.edu << This is the best way to get in touch. Provide name & class information >>

Websites: www.MyMathLab.com & <https://laulima.hawaii.edu>

Zoom Video Link: <https://hawaii.zoom.us/j/2025344398> <<Meeting ID: 202 534 4398 >>

Dedicated Office Hours (via Zoom): W 11:30am – 1:00pm, F 10:30am – 1:00pm, & by appointment

Office Telephone #: (808) 236 – 9278 << If I don't answer leave a message with contact information >>

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 the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

Catalog Description

Utilizes basic statistical topics including measures of central tendency and dispersion, classification of variables, sampling techniques, elementary probability, normal and binomial probability distributions, tests of hypothesis, linear regression and correlation in order to solve problems.

Prerequisites: Grade of "C" or better in Math 25, 26, 28, 29, 75X or higher or equivalent, satisfactory math placement test score, or consent of instructor.

Learning Resources and Materials

Everything you need for this course is available online at the <http://www.MyMathLab.com> website. We will utilize most of the tools available through this website. You must get an access code for this course to use all course material. You can either buy the access code directly from MyMathLab website when registering for the course online or buy the textbook which comes with the access code. **Textbook for this course is "Fundamentals of Statistics, Informed Decisions Using Data", 5th edition by Sullivan III.** Purchase of the physical textbook is not required since all material including e-book is available online. Reliable computer with access to broadband internet is required for this course. I highly recommend that you have access to Excel or similar program, and a calculator. Students can also borrow a calculator from WCC library.

Your first priority is to go to www.MyMathLab.com and register for the course. Enter the Course ID **singh63834** when required. There will be an option to either buy an access code or enter the one that came with your textbook. If you are waiting for the access code, you can sign up for a free trial period.

Course Level Student Learning Outcomes

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

- Demonstrate proficiency in graphing, statistical data, calculating measures of central tendency, measures of variation, percentiles, correlation coefficients, and regression line.
 - Interpret statistical information provided in graphs, in summary measures (central tendency, dispersion, percentile), and in the correlation coefficient.
 - Solve probability problems involving compound events, independent events, mutually exclusive events, and conditional probability.
 - Calculate and interpret probabilities for normal or binomial distributions, including the use of the Central Limit Theorem.
 - Demonstrate the use of inferential statistics.
 - Utilize appropriate statistical terminology and mathematical symbols to effectively communicate mathematics in written and/or oral form
- All SLOs assessments are embedded in class activities, homework, quizzes, or exams.

Tasks and Grading

Point Distribution		
Assignments	10 HW Assignments @ 20 Pts Each	200 pts
Review	Three Exam Reviews @ 20 Pts Each	060 pts
Others	Orientation + Three Consultations @ 10 Pts Each	040 pts
Exams	Three Exam (Including Final) @ 100 Pts Each	300 pts
Total Points		600 pts

Letter grades will be assigned based on the following standard scale

A ⇒ 90% ↑ ; B ⇒ 80% ↑ ; C ⇒ 70% ↑ ; D ⇒ 60% ↑ ; F ⇒ below 60%;

Other grade options include N, CR, NR, I, and W. See the following information for detail:

"The 'N' grade indicates that the student has worked conscientiously, attended regularly, finished all work, fulfilled course responsibilities, and has made measurable progress. However, either the student has not achieved the minimal student learning objectives and is not yet prepared to succeed at the next level, or the student has made consistent progress in the class but is unable to complete the class due to extenuating circumstances, such as major health, personal or family emergencies." If you would like to request for N grade in this class, you must provide a formal letter of request to me no later than the time of final examination addressing how you have met the criteria for N grade. Then I will make a decision on whether or not you qualify for the N grade.

The CR/NC grades require written instructor consent. Overall score of 70% or higher is consider CR and below 70% is NC. Students must apply for CR/NC grading option at the Admissions Office by the posted deadline. If a student does not apply for CR/NC grading option at the Admissions Office by the required deadline and if s/he does not withdraw, a letter grade (A, B, C, D, F, N) will be assigned for the course.

The W grade is given only when the student officially withdraws from the course by the posted deadline.

The “I” grade is a temporary grade given at the instructor’s option when a student has failed to complete a small part of a course because of circumstances beyond his or her control. The “I” grade is given by student request and must be approved by the instructor.

Student’s Responsibilities

Responsible students take ownership of their actions by exhibiting the following behaviors in this class:

- Take an active role in learning and set aside adequate time for doing assignments
- Maintain a positive and inquiry attitude towards learning.
- Complete assignments by the designated dates with attention to quality of work.
- Actively communicate with instructor and seek immediate help when needed.
- Be proactive and do not procrastinate since new concepts are built on previously learned material.

Assignments

All homework assignments (including final exam review) are available through mymathlab under homework. Note that each homework problems are worth equal credit. To stay on track, complete each homework by the indicated due date. You may attempt a homework problem as many times as needed, till you get it right. You may continue to work on the homework assignments after the due date, however, there will be a 1% penalty per day on the homework done after the due date. While this may not be much for a day or two late submissions, it will add up to a high percentage over longer period. Note that December 17th is the absolute last day you will be allowed to work on homework assignments. It is very important that you stay current and do not fall behind in this class because it will be very difficult to catch up at the end.

Exams

There are three-unit exams (including the final) in this class that should be taken in single sitting (90 minutes time limit). Exams are available at MyMathLab.com under quizzes and tests tab and must be completed by the due date (see last page of syllabus). To prepare for the exams, students should complete each exam review which also count as part of the grades. Students can use all available resources (i.e. calculator, textbook, google, youtube, MyMathLab resources) on the exams except getting help from another person (i.e. no help from peers, tutors, or online live chat/video).

Consultations

There are four required consultations for this class worth 10 points each that can be conducted via zoom video during my dedicated office hours or scheduling a meeting at a time that is convenient for both of us. Your participation in class orientation will count as your 1st consultation. During the orientation, I will go over the course syllabus and answer any questions or concerns students may have about this class. Consultations can be done any time during the semester to get help on homework or exam reviews, go over your mistakes on a exams, or discuss your progress in class (preferably before the drop date). Any general questions regarding the class or ways to improve grades can also be discussed. Note that purpose of these

consolations is for us to connect with each other at least few times during the term. I encourage you to reach out to me for help as often as needed.

Academic Dishonesty

Plagiarism and use of another's work without proper acknowledgment is not permitted. A student caught cheating, may receive a failing grade for the course. All students are required to follow the Student Conduct Policies described at http://www.wcc.hawaii.edu/Policies/5_3_Student_Conduct.php.

Math Help Outside of Class

In addition, MyMathlab.com resources and reaching out to me for help, you should also utilize the following resources:

- [The link](#) provides information about WCC Math Lab
- <http://www.hawaii.edu/tutor> – Provides free 24/7 online tutoring
- <http://www.khanacademy.org> – Provides small lecture videos on selected topics
- <http://manoa.hawaii.edu/ola> - Provides free live interactive tutoring during weekdays

Note that libraries in the UH system has many wonderful resources as well. Here is a link to WCC library: <https://library.wcc.hawaii.edu>.

Growth Mind Set

No one is born with Math brain. Everyone can develop skills necessary to learn Math. Mathematics helps create multiple connections in your brain, which lead to tremendous brain growth as supported by various research. Here is short video that I recommend you watch before starting this course: <https://youtu.be/bxrPy1fjVU4>.

Disabilities Accommodation

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 your succeed in this class. You can reach Roy Inouye (located in Hale Kako'o 106), Interim Disabilities Counselor, at (808) 235-7448 or at royinouye@hawaii.edu,

Communication

The following methods will be used to communicate:

- E-mail will be our primarily mode of communication (make sure to check your UH email frequently). I will do my best to response to your emails within 24 hours on instructional days (perhaps much sooner). This is an effective method of communication if you expect a short response.
- You can connect with me via Zoom Video using the ID 202 534 4398 or via Google Video using the UH ID navej@hawaii.edu during dedicated office hours (or via an appointment) to get elaborative help.
- If you go to windward community college or live nearby, you can stop by office anytime during my office hours or make an appointment to see me (This option will be limited in spring 2021 due to COVID-19).

- Alternatively, you can also connect with me via my office phone (808) 236 – 9278 during my office hours or leave a message for me to return your call.
- Online discussion board can be used to interact with classmates by asking homework questions and answering previously posted problems.

Foundations Quantitative Reasoning Hallmarks

This course fulfills 3 credits of the General Education requirements for both an A.A. degree at WCC and a Bachelor's degree at 4 year UH institutions. Consequently, it meets the hallmarks of the quantitative reasoning requirement. This 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.

Remarks

Please check your WCC e-mail account frequently for important announcements. Note that this syllabus is subject to change in extenuating circumstances. When communicating via e-mail or leaving voice message for me, please include your name, course and contact information so that I can easily identify you and get back to you in a timely manner. Make up work will only be allowed upon showing proof of excused absence. For additional academic information, refer to WCC website www.windward.hawaii.edu or go to www.hawaii.edu for system wide 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 (located in Alakai 121) at (808) 235-7422 or email wccaa@hawaii.edu. If you stop attending this class for any reason, it is your responsibility to drop it.

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/](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.

Math 115 Fall 2021 Schedule for Assignments and Exams

Week	Dates (M-F)	Homework Assignments (All HWs are Due by Midnight of Assigned Date)
1	8/23 – 8/27	Orientation, sign up for MyMathLab, and get started with the course
2	8/30 – 9/03	Homework #01 (Chapter 1) – Due by 9/4
3*	9/6 – 9/10	Homework #02 (Chapter 2) – Due by 9/11
4^	9/13 – 9/17	Homework #03 (Chapter 3) – Due by 9/18
5	9/20 – 9/24	Homework #04 (Chapter 4) – Due by 9/25
6*	9/27 – 10/1	Exam 1 Review (CH 1 – 4) – Due by 10/3
7	10/4 – 10/8	Exam 1 (focus on CH 1 – 4) – Due by 10/9
8	10/11 – 10/15	Homework #05 (Chapter 5) – Due by 10/23
9	10/18 – 10/22	Homework #06 (Chapter 6) – Due by 10/30
10	10/25 – 10/29	Homework #07 (Chapter 7) – Due by 11/6
11	11/1 – 11/5	Exam 2 Review (CH 5 – 7) – Due by 11/7
12*	11/8 – 11/12	Exam 2 (focus on CH 5 – 7) – Due by 11/13
13	11/15 – 11/19	Homework #08 (Chapter 8) – Due by 11/20
14*	11/22 – 11/26	Homework #09 (Chapter 9) – Due by 11/27
15	11/29 – 12/3	Homework #10 (Chapter 10) – Due by 12/4
16	12/6 – 12/10	Final Exam Review – Due by 12/12
17**	12/13 – 12/17	Final/Exam 3 (focus on CH 8 – 10) - Due by Dec. 17 th

^Drop Dates:

September 14, 2021 – Last day to withdraw without a W grade

*Holidays:

September 6, 2021 – Labor Day

November 11, 2021 – Veterans' Day

November 25-26, 2021 – Thanksgiving Break