

DRAFT POST TO WEB San José State University
Department of Health Science and Recreation
HS 167 Biostatistics
Spring 2015

- Instructor:** B. Burt Gerstman, PhD
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- Teaching Assistants:** Paola Luna paola_davenport@yahoo.com
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- Telephone:** Please use email instead: b.b.gerstman@sjsu.edu
Emergency messages only: 408 924-2780
- Office Location & Hours:** Thursday 1:30 – 2:45 by appointment only. Please use b.b.gerstman@sjsu.edu to set up an appointment with at least 48 hours notice. Location will be either MH 514 or Emeritus Professor Office in Library Administrative Complex, MLK Library 4th floor.
- Lecture (required of all):** Section 1: Tu and Th 12:00 – 13:15 in BBC 202
- Lab (enroll in one section):** Section 2: Tu 1515 – 1630 in MH 321 – probably cancelled – enrolled students should switch out → go to MH 407 request change
Section 3: We 1200 - 1315 in MH332 (Ms. Luna)
Section 4: Tu 1400 – 1515 in MH321 (Ms. Luna)
Section 5: Th 1515 – 1630 in MH332 (Ms. Doan)
Section 6: Th 1400 – 1515 in MH332 (Ms. Doan)
- Prerequisites:** You must complete the CSU Entry Level Math (ELM) requirement before entering the class.
You must complete either HS 67 (Introductory Health Statistics) or an equivalent lower division statistics course before entering the class.
- Course Web Pages:** **Main page:** <http://www.sjsu.edu/faculty/gerstman/hs167/>. Contains link to assignment calendar!
- Canvas site:** SJSU uses the learning management system, Canvas by Instructure (sjsu.instructure.com), log in and click on your course HS 167. Check the course website three times weekly for important information. Use the Canvas message tool for all course correspondence. I will respond to inquiries within 48 hours. Use of Canvas discussion forums is strongly encouraged on course topics so that other students may also benefit.
- Course Description:** Statistical analysis of health and biological data covering measurement scales, random sampling, data quality, data storage, descriptive and exploratory techniques, probability distributions, estimation and hypothesis testing; includes an integrated lab activity.

Required Texts

Gerstman, B.B. (2015). *Basic Biostatistics: Statistics for Public Health Practice. Second Edition.* Jones & Bartlett: Burlington, MA.

HS 167 Biostatistics Lab Manual. Available from Maple Press. 81 E San Carlos St San Jose, CA 95112 (408) 297-1000 Approximately \$4.50.

Calculator

TI-30XIIS or equivalent. (Only the TI-30XIIS will be supported.)

Cell phones will not be allowed as substitutes for calculators during exams.

Classroom Protocol

Successful completion of this course requires approximately 8 hours per week each and every week. Cramming is ineffective. If you do not have adequate time to devote to this course, you should drop this course immediately and enroll at a future date. Attendance of lecture and lab is critical to the success of the course. Cell phones are expected to be in silent mode during class.

Grades

Your course grade is your average HW scores (100 points), lab scores (100 points), midterms (200 points), and the final exam (200 points). These scores will be averaged with grade cut-offs as follows:

100-97%	A+	89-87%	B+	79-77%	C+	69-67%	D+	Below 60%	F
96-93%	A	86-83%	B	76-73%	C	66-63%	D		
92-90%	A-	82-80%	B-	72-70%	C-	62-60%	D-		

Exam dates

Midterm 1 – Thursday Feb 26 during regularly scheduled class time

Midterm 2 – Thursday April 9 during regularly scheduled class time

Final – Friday May 15 9:45 – 12:00

Course Technology

Assignment calendar: Homework assignments are posted on a **Google spreadsheet** linked to the main website page www.sjsu.edu/faculty/gerstman/hs167. **This is the most important planning and organizational tool we have in the course! New assignments will be posted Mondays and are due the following Tuesday at noon unless stated otherwise.**

Canvas: The course will utilize the Canvas e-campus service. The syllabus, course assignments, and class presentations must all be accessed via Canvas. The service will also be used for class discussions and to communicate regarding class assignments.

If you have questions or concerns about technology, you can get answers from the help desk at helpdesk@sjsu.edu or call 408-924-2670 and the eCampus website: <http://www.sjsu.edu/at/ec/>

Software

All necessary software is installed in the College of Applied Sciences and Arts Computer Labs (MH 321 and MH332). Open lab hours posted on <http://www.casa.sjsu.edu/openhours.asp>.

Course Specific Learning Objectives

Upon successful completion of this course, students will be able to:

1. **Data (Ch 1)** — classify quantitative, ordinal, and categorical measurements; create SPSS variables and an SPSS data table; articulate the importance of valid measurements.
2. **Exploratory Data Analysis (Ch 3 & Ch 4)** — construct and interpret stemplots, construct and interpret frequency tables (frequency, relative frequency, cumulative frequency); calculate and interpret means and standard deviations; calculate and interpret medians and quartiles; draw and interpret Tukey's boxplots.
3. **Inference for quantitative outcomes (Chapters 9 - 12)** — calculate and interpret confidence intervals for means and mean difference; test means for significance (z and t procedures); calculate power and sample size requirements when testing means.
4. **Inferences for categorical outcomes (Ch 16 & Ch 17)** — calculate and interpret confidence intervals for proportions; calculate and interpret confidence intervals for relative risks.

Library Liaison

Each discipline has a dedicated expert librarian, available to assist students in person, online, and over the phone. The Health Science Librarian is Adriana Poo. You can reach her at adriana.poo@sjsu.edu.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's [Catalog Policies](http://info.sjsu.edu/static/catalog/policies.html) section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the [current academic calendar](http://www.sjsu.edu) web page located on the www.sjsu.edu website. The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy/>. Students should be aware of the current deadlines and penalties for dropping classes. Information about the latest changes and news is available at the [Advising Hub](http://www.sjsu.edu/advising/) at <http://www.sjsu.edu/advising/>.

University Policies

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The [University's Academic Integrity policy](#) requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy S07-2 requires approval of instructors.

The **rules for independent work** are:

1. **Exams and quizzes** are to be done on your own without the aid of published (print or web) materials other than those expressly permitted according to the rules of the test.

2. **Labs:** You may collaborate freely on **lab** exercises.
3. **Homework exercises** are to be done on your own but you can enlist the help of the instructor, TA, and classmates. You are encouraged to communicate openly about homework exercises on the Canvas discussion forums.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at <http://www.sjsu.edu/aec/> to establish a record of their disability.

SJSU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The [Writing Center website](http://www.sjsu.edu/writingcenter/about/staff/) is located at <http://www.sjsu.edu/writingcenter/about/staff/>.

SJSU Peer Connections

The Learning Assistance Resource Center (LARC) and the Peer Mentor Program have merged to become Peer Connections. Peer Connections is the new campus-wide resource for mentoring and tutoring. Our staff is here to inspire students to develop their potential as independent learners while they learn to successfully navigate through their university experience. Students are encouraged to take advantage of our services which include course-content based tutoring, enhanced study and time management skills, more effective critical thinking strategies, decision making and problem-solving abilities, and campus resource referrals.

In addition to offering small group, individual, and drop-in tutoring for a number of undergraduate courses, consultation with mentors is available on a drop-in or by appointment basis. Workshops are offered on a wide variety of topics including preparing for the Writing Skills Test (WST), improving your learning and memory, alleviating procrastination, surviving your first semester at SJSU, and other related topics. A computer lab and study space are also available for student use in Room 600 of Student Services Center (SSC).

Peer Connections is located in three locations: SSC, Room 600 (10th Street Garage on the corner of 10th and San Fernando Street), at the 1st floor entrance of Clark Hall, and in the Living Learning Center (LLC) in Campus Village Housing Building B. Visit Peer Connections website at <http://peerconnections.sjsu.edu> for more information.