Instructor Contact Information

Instructor: Dave Schuster, Ph.D.  
Office Location: DMH 315  
Telephone: 408-924-5659  
E-mail: david.schuster@sjsu.edu  
Office Hours: By appointment

Course Information

Classroom: Clark Building 316  
Class Days/Time: Tues. & Thurs., 1:00pm – 4:45pm  

Prerequisites: Satisfaction of ELM requirement and two years of high school algebra. Failure to satisfy this prerequisite will result in the retroactive assignment of a “U” grade in this course. Information on the ELM can be obtained on the web at http://testing.sjsu.edu/eptelm/

GE/SJSU Studies Category: GE Area B4: Mathematical concepts

Course Format

This course uses elements from hybrid learning. Internet access is required, as described below.

Course Description

We live in a time of unprecedented access to information. We have new abilities, and new responsibilities, to research the best doctor, school, job, relationship, and more. The Internet has thrown open the doors to vast pools of data. Statistics are objective and systematic methods for describing and interpreting information so that you may make the most informed decisions throughout your life.
From the catalog: Organization and classification of data, graphic representation, measures of central tendency and variability, percentiles, normal curve, standard scores, correlation and regression, and introduction to statistical inference; use of microcomputers for statistical calculations.

Course Goals and Student Learning Outcomes

**Program Learning Outcomes**
Upon successful completion of the requirements for a major in psychology, students will be able to:

- **PLO1** – Knowledge Base of Psychology – identify, describe, and communicate the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology
- **PLO2** – Research Methods in Psychology – design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations
- **PLO3** – Critical Thinking Skills in Psychology – use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes
- **PLO4** – Application of Psychology – apply psychological principles to individual, interpersonal, group, and societal issues
- **PLO5** – Values in Psychology – value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society

**Course Goals**
In terms of Mathematical Concepts (Area B-4), Stat 95 will focus on:

- Basic mathematical techniques for solving quantitative problems
- Elementary numerical computation
- The organization, classification, and representation of quantitative data in various forms, such as tables, graphs, rates, percentages, measures of central tendency and spread
- Applications of mathematics to everyday life

Stat 95 will incorporate issues of diversity in many ways (e.g., in lectures and assignments).

**GE and Course Content Learning Outcomes**
Upon successful completion of this course, students will be able to:

- **CLO1** – Use statistical methods to solve quantitative problems, including those presented in verbal form
- **CLO2** – Demonstrate the ability to use mathematics and statistics to solve real-life problems
- **CLO3** – Arrive at conclusions based on numerical and graphical data.

The learning outcomes will be assessed via written assignments and exam questions. These assessment items will involve solving verbal and symbolic quantitative problems, including those that involve real-world situations. Students will be required to arrive at conclusions using numerical and graphical data. For example, students may view a scatterplot depicting data for the amount of sleep (X) and visual memory (Y), and will determine whether a relationship exists between these variables. If so, they will describe the nature and strength of this relationship (CLO 3). In addition, students will compute appropriate statistical measures that describe the relationship (CLO 1) and then determine the practical implications of the observed relationship (CLO 2, 3).
Stat 95 requires students to write a minimum of 500 words in a manner appropriate to quantitative analysis. The writing requirement will be met via a written project (described below). Writing will be assessed for grammar, clarity, conciseness, and coherence.

Required Materials

**Reliable Access to the Internet**
Having access to the Internet is your responsibility, so have backup plans in case you have problems with your primary computer. I cannot accept excuses about technology problems as valid, unless the entire University network or all of Canvas is offline.

**Udacity: Online Lectures**
Supplemental lecture videos are provided through Udacity. You must enroll with Udacity (free) in addition to enrolling through SJSU. Visit: [http://www.udacity.com/overview/Course/st095/](http://www.udacity.com/overview/Course/st095/)


**Canvas and E-Mail: Communication, Grades, Quizzes, and Submissions**
Use of the Canvas learning management system and e-mail are required. Supplementary course material will be made available on Canvas regularly. Communication regarding the course will be sent via the e-mail address linked to your MySJSU account or posted to Canvas. It is your responsibility to make sure you are enrolled in Canvas and receiving my e-mails.

How to get connected:

- You will need your SJSU ID to login. You should have received a message from the Registrar’s Office providing your SJSU ID.
- If you’ve never logged into Canvas, then you’ll first need to activate your SJSUOne account. Visit the following page to activate your account: [https://sjsuone.sjsu.edu/LDAPAccount/Activate/Activate.aspx](https://sjsuone.sjsu.edu/LDAPAccount/Activate/Activate.aspx).
- Once activated, you can login to Canvas at [https://sjsu.instructure.com/login](https://sjsu.instructure.com/login).

Answers about Canvas can be found at [http://guides.instructure.com](http://guides.instructure.com).

**Recommended Textbook**
There is no required textbook for this course. You may wish to consult a textbook for additional explanation of course topics. To help you do that, a stats textbook is on reserve at the library. Free, online textbooks are another option:

Collaborative Statistics available at [http://cnx.org/content/col10522/latest/](http://cnx.org/content/col10522/latest/)

**Calculator**
You need a dedicated scientific or graphing calculator for this course. The best calculator for this course is the **TI-36X Pro**, which costs about $20 retail (available at OfficeMax, Staples, Wal-Mart, the
bookstore, etc.). It only comes in black, and it looks like this:

If you already own a graphing calculator that is a TI-83 or TI-84 (many people already own one), that will work, too. This includes the:

- TI-83
- TI-83 Plus
- TI-83 Plus Silver Edition
- TI-84 Plus
- TI-84 Plus Silver Edition
- TI-84 Plus C Silver Edition
- TI-Nspire with Clickpad (Note: you need the free TI-84 Plus keypad)
- TI-Nspire with Touchpad (Note: you need the free TI-84 Plus keypad)

Other scientific or graphing calculators are acceptable as long as they have statistics functions, normal distribution functions, a random number generator, and square root and exponent buttons. I can provide the most help with the TI-36X Pro. If you decide to use a different calculator, keep your calculator manual handy. You may have to translate the procedures in this guide for your calculator. I can help you decide if your calculator will be sufficient for the course.


Grading Policy

**How to be Successful in this Course**

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week with 1 of the hours used for lecture), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

As an example, the expectation of work for this 10-week, 3-credit course is 13.5 hours of student work related to this class each week. Examples of student work include such things as progressing through the Udacity lessons, problem sets, regular studying of concepts, reviews assessments and study guides, StatCrunch projects, reading statistics-related material, meaningful participation in online discussions, and exams.

It is **essential** that you make time every week to:

- Check Canvas and your e-mail for course announcements and changes.
- Check this syllabus for due dates and upcoming assignments and plan accordingly.
- Watch and participate in the assigned lecture video(s) and take notes as you would if you were in class.
- Come to class for a summary lecture and to complete the in-class activity.
- Ask questions in class or via e-mail.

**Grading Scale**

Grades will be available to you on Canvas throughout the semester. Grades are assigned based on your final point total (out of 1000 points for the semester):

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<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>A+</td>
<td>966+ points</td>
</tr>
<tr>
<td>A</td>
<td>916 - 965 points</td>
</tr>
<tr>
<td>A-</td>
<td>896 - 915 points</td>
</tr>
<tr>
<td>B+</td>
<td>866 - 895 points</td>
</tr>
<tr>
<td>B</td>
<td>816 - 865 points</td>
</tr>
<tr>
<td>B-</td>
<td>796 - 815 points</td>
</tr>
<tr>
<td>C+</td>
<td>766 - 795 points</td>
</tr>
<tr>
<td>C</td>
<td>716 - 765 points</td>
</tr>
<tr>
<td>C-</td>
<td>696 - 715 points</td>
</tr>
<tr>
<td>D+</td>
<td>666 - 695 points</td>
</tr>
<tr>
<td>D</td>
<td>616 - 665 points</td>
</tr>
<tr>
<td>D-</td>
<td>595 - 615 points</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 595 points</td>
</tr>
</tbody>
</table>

**Rounding is Included in the Grading Scale**

The point totals reflect rounding up to the nearest percentage. For example, an A- would normally require 900 points (or 90% of 1000 points). With rounding, it only requires 896 points (or 89.6% of 1000 points). Because rounding is built in to the grading scale, your grade will be based on your final point total, rounded to the nearest whole point (so, 895.75 points is an A-, but 895.25 points is a B+). To be fair to everyone in the class, these are firm cutoffs; do not ask for more rounding or unfair adjustments to your grade.

**Course Requirements and Assignments**

**Writing Assignment**

*The writing assignment is 20% of your final grade (200 points total).*

There will be one paper due this semester. The paper must be at least 500 words. A handout describing the content and grading of the paper will be posted to Canvas. The paper will be worth 200 points.

**In-Class Activities**

*Exams are 16% of your final grade (160 points total).*
We will do an in-class activity during most class meetings. The written portion of the in-class activity is due at the end of the class meeting. You get full points for completing the activity unless it’s obvious that you did not try, or you turned it in incomplete. Blatantly effortless work gets a zero, nearly-but-not-quite complete work gets half credit, and incomplete work gets a zero. You must be present for the entire activity to receive credit.

**Exams**

*Exams are 60% of your final grade (600 points total).*

Three exams are worth 200 points each. These three exams will focus on applying the knowledge learned in the previous part of the course. The third exam is the non-cumulative final exam.

You may bring and refer to your textbook and your notes on the quizzes and exams. You may also use a single dedicated scientific or graphing calculator, but no other electronic device is allowed. **All other assistance is prohibited.** For example, you cannot use computers, mobile phones, watches, or tablets, even if they have a calculator function. If you will need to refer to material posted to Canvas, you will need to print it out ahead of time. If you have any questions about what material is allowed, ask me. I take academic integrity very seriously (see “Academic Integrity,” below).

**Problem Sets**

*Udacity problem sets are recommended but are not part of your grade.*

Each lesson on Udacity is followed by a problem set. These problem sets are meant to help you self-assess your knowledge of the concepts covered in each Lesson. All problem sets are multiple-choice or short answer. Although they are not graded, they are a useful tool for you to assess your learning. It is strongly recommended that you complete them.

**Engagement Week**

*Engagement week activities are 4% of your final grade (40 points total) plus 2% (20 points) of extra credit.*

Just as the name would imply, Engagement Week is your opportunity to make sure you’re ready for the compressed summer session, and if so, that you are also ready to meet the challenges, responsibilities, and expectations of this class in particular. The week will involve three activities; each designed to get you ready to succeed in our class.

- **Introduction to Canvas** – Getting logged into and familiar with Canvas is key to your success. This activity will require you to activate your Canvas account, download material, and take a quiz in Canvas. By the way, the quiz will be based on the course syllabus! This quiz is extra credit. A perfect score will earn you 20 points of extra credit.

- **Your personalized 30-day schedule** – This activity guides you in the preparation of your individualized class schedule. Instructions can be found on the “Modules” page in Canvas. This assignment is worth 50 points.

- **Obtain a calculator.**

**Make-Up and Extension Policy**

Make-ups or extensions for any graded assignment will only be given when:

- The reason is exceptional, unforeseen, and unavoidable. Examples of exceptional circumstances are health emergencies, religious obligations, and military service. Work scheduling is not a sufficient reason for a make-up or extension.
• You can provide written documentation.
• You notify the instructor immediately after you become aware of the circumstances requiring a make-up or extension by filling out this form:
• You submit a request form at http://goo.gl/OEoQim.

If the need for a make-up is known before the assignment due date, the assignment must be completed early. Make-up exams will be scheduled based on instructor availability. Do not e-mail your instructor with requests for a make-up or extension; instead, complete the request form.

Learning Environment
We will be working in groups frequently. The success of your group depends on respect for everyone involved. Specifically:

• Come to class having watched the lecture and with prepared questions. Showing up unprepared is unfair to the rest of your group and will waste your time as well. If you are unprepared, excuse yourself from your group to catch up on your own.
• Class will start on time; avoid arriving late. If you are late, enter quietly.
• Silence your electronics during class. Don’t text, check your phone, IM, or surf off-topic websites during class; if you have a legitimate need to do these things, leave the room quietly. If you do any of these things in class, you will be asked to leave.
• Stay on topic during group work.

Recording and Distributing Class Content
University Policy S12-7, http://www.sjsu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor’s permission to record the course. You may not make audio or video recordings in this class. By enrolling in this course, you have not been given any rights to reproduce or distribute the material. Course material developed by the instructor remains the intellectual property of the instructor. You may not publically share or upload instructor-generated material for this course without written permission of the instructor.

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 section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic year calendars document on the Academic Calendars webpage at http://www.sjsu.edu/provost/services/academic_calendars/. The Late Drop 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 at http://www.sjsu.edu/advising/.
Academic Integrity

Your commitment as a student to learning is evidenced by your enrollment at San José State University. The University Academic Integrity Policy S07-2 at [http://www.sjsu.edu/senate/docs/S07-2.pdf](http://www.sjsu.edu/senate/docs/S07-2.pdf), requires you to be honest in all your academic course work. Faculty members are required to report infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at [http://www.sjsu.edu/studentconduct/](http://www.sjsu.edu/studentconduct/).

Instances of academic dishonesty will not be tolerated. Cheating on assignments or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without giving proper credit) may result in a failing grade on the assignment, a failing grade in the course, and/or 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 any material you have submitted in another class or plan to submit for another class, please note that SJSU’s Academic Integrity Policy S07-2 requires approval of instructors.

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 at [http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at [http://www.sjsu.edu/aec](http://www.sjsu.edu/aec) to establish a record of their disability.

About Diversity

Consistent with the mission of San José State University, I welcome persons of differing backgrounds and experiences including but not limited to age, disability and health status, ethnicity and race, family structure, geographic region, language, religious/spiritual and secular beliefs, resident status, sex, sexual orientation and gender identity/expression, and socioeconomic status.

It is my goal to foster an environment in which diversity is recognized and embraced, and every person is treated with dignity, respect, and justice. I hope that your academic experience in this course and at San José State University will provide the opportunity to gain knowledge and experiences necessary to thrive in a diverse, global environment.

Additional Resources at San José State University

**Library Liaison**

Your library liaison can help with library research questions.

Bernd Becker  
Phone: (408) 808-2348  
Email: bernd.becker@sjsu.edu

**Technology Resources**

Computer labs for SJSU student use are available in the:

- Academic Success Center at [http://www.sjsu.edu/at/asc/](http://www.sjsu.edu/at/asc/) located on the 1st floor of Clark Hall
- Associated Students Lab on the 2nd floor of the Student Union
- Martin Luther King Library

Check with each lab for hours and to see what software is available for your use.

**SJSU Peer Connections**

Peer Connections, a campus-wide resource for mentoring and tutoring, strives to inspire students to develop their potential as independent learners while they learn to successfully navigate through their university experience. You are encouraged to take advantage of their 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](http://peerconnections.sjsu.edu) for more information.

**SJSU Writing Center**

The SJSU Writing Center is located in Clark Hall, Suite 126. All Writing Specialists have gone through a rigorous hiring process, and they are well trained to assist all students at all levels within all disciplines to become better writers. In addition to one-on-one tutoring services, the Writing Center also offers workshops every semester on a variety of writing topics. To make an appointment or to refer to the numerous online resources offered through the Writing Center, visit the Writing Center website at [http://www.sjsu.edu/writingcenter](http://www.sjsu.edu/writingcenter). For additional resources and updated information, follow the Writing Center on Twitter and become a fan of the SJSU Writing Center on Facebook. (Note: You need to have a QR Reader to scan this code.)

**Counseling Services**

Personal Counselors are available to help students identify and accomplish their academic and career goals, enhance personal development, meet life's challenges, and improve interpersonal relationships.

Free short-term psychological counseling is available to individuals and couples who are matriculated students of San José State University. Students are eligible to receive six sessions per semester.

The SJSU Counseling Services is located on the corner of 7th Street and San Fernando Street, in Room 201, Administration Building. Professional psychologists, social workers, and counselors are available to provide consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit the Counseling Services website at [http://www.sjsu.edu/counseling](http://www.sjsu.edu/counseling).

**Wellness Workshops**

Attending to your wellness is critical to your success at SJSU. Early in your college career is the best time to take advantage of workshops and programs offered through the SJSU Student Health Center/Wellness & Health Promotion Department. Past workshops have included time management, community resources,
study skills & note-taking, overcoming stress, test anxiety & test taking skills, goal setting, assertiveness & communication, improving self-esteem, graduate school, first-generation success, and more. For more information and a schedule of workshops, visit the Workshop list at http://www.sjsu.edu/counseling/students/Workshops.

Course Schedule
The official course schedule is available on Canvas and should be considered part of this syllabus. The course schedule is subject to change; modifications will be posted to Canvas.

<table>
<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
<th>Udacity lesson &amp; Problem sets</th>
<th>Handout Review before class</th>
<th>In-Class Activity Due at the end of class</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>June 3</td>
<td>Intro to research and measurement</td>
<td>Watch before class</td>
<td>1</td>
<td>1</td>
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<tr>
<td>2</td>
<td>June 5</td>
<td>Visualizing data</td>
<td>1 &amp; 2</td>
<td>2</td>
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<td></td>
<td></td>
<td>Central tendency</td>
<td>3 &amp; 4 (optional)</td>
<td></td>
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<td></td>
<td></td>
<td>Variability</td>
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</tr>
<tr>
<td>3</td>
<td>June 10</td>
<td>Exam 1</td>
<td>5 &amp; 6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
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<td>z-Scores &amp; the normal distribution</td>
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<td></td>
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</tr>
<tr>
<td>4</td>
<td>June 12</td>
<td>Sampling distributions</td>
<td>7</td>
<td>5</td>
<td>4</td>
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<tr>
<td>5</td>
<td>June 17</td>
<td>Hypothesis testing &amp; Estimation</td>
<td>9</td>
<td>6</td>
<td>5</td>
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<td>6</td>
<td>June 19</td>
<td>Exam Review</td>
<td>10 &amp; 11</td>
<td>7</td>
<td>6</td>
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<td>Exam 2</td>
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<td>7</td>
<td>June 24</td>
<td>T-Tests</td>
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<td>8</td>
<td>June 26</td>
<td>Writing Assignment Due June 26 at 1:00pm</td>
<td>12 &amp; 13</td>
<td>8</td>
<td>7</td>
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<td>July 1</td>
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<td>July 3</td>
<td>Exam Review</td>
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