Instructor Contact Information

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Dave Schuster, Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Location:</td>
<td>DMH 315</td>
</tr>
<tr>
<td>Telephone:</td>
<td>408-924-5659</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:david.schuster@sjsu.edu">david.schuster@sjsu.edu</a></td>
</tr>
<tr>
<td>Office Hours:</td>
<td>MW 2:45 - 3:45 pm or by appointment</td>
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Course Information

<table>
<thead>
<tr>
<th>Classroom</th>
<th>DMH 353</th>
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<tbody>
<tr>
<td>Class Days/Time:</td>
<td>Tuesday and Thursday 1:30 – 2:45pm</td>
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<tr>
<td>Prerequisites</td>
<td>Stat 95 or equivalent</td>
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Course Description

This course will prepare you to use statistics inside and beyond the research laboratory. Concepts presented in this course will be useful to critical thinkers in an increasingly data-focused society, and the techniques covered will provide a foundation for conducting real-world research in the social sciences.

From the catalog: Statistical analysis at the intermediate level; chi-square, analysis of variance, correlation and regression, and topics in experimental design; use of microcomputers for statistical calculations. Intended for majors in education, nursing, personnel administration, psychology, social service and sociology, and psychology minors.
Course Goals and Student Learning Objectives

Program Learning Objectives
Upon successful completion of the requirements for a major in psychology, you 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 Learning Objectives
The major goal of this course is to provide you with a solid foundation in statistics as they are used in psychology and the social sciences. We will examine the logic and strategies of scientific research and learn how to use appropriate inferential statistics to make sense out of data. You will learn what statistics are available, when to use specific statistics, and how to interpret results.

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

. CLO1 - Understand the logic of statistical concepts.
. CLO2 - Use appropriate statistical methods to solve quantitative problems and test hypotheses.
. CLO3 - Understand the logic and strategies of scientific research designs.
. CLO4 - Run statistical analyses using SPSS and interpret statistical information presented in SPSS output.

The learning objectives will be assessed via written assignments and exam questions. The course learning objectives were adapted from those of Dr. Megumi Hosoda.
**Required Materials**

**Canvas and MYSJSU Messaging**
Use of the Canvas learning management system (Log in to Canvas at https://sjsu.instructure.com/) and e-mail are required. Supplementary course material will be made available on Canvas regularly. Communication regarding the course will be sent via the MySJSU messaging system or posted to Canvas. It is your responsibility to make sure you are enrolled in Canvas and receiving my e-mails.

**Recommended Textbook**
The textbook is recommended but not required. The textbook is intended as a reference to supplement handouts and lectures. The previous edition is on reserve at the library for your reference.


Free, online introductory stats texts are another option. However, I have not reviewed these texts extensively, so they may not eliminate your need for the recommended textbook. In addition to (or instead of) the recommended text, you may wish to use one of these free online textbooks:

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


**Calculator**
You need a dedicated scientific calculator for this course. Calculators that run as an app on a device will not be allowed on quizzes or exams. I recommended the **Texas Instruments TI-36X Pro** (watch out because the other model names are confusingly similar). The TI-36X Pro provides many of the features found in graphing calculators but at a lower price ($18-$23 at OfficeMax, Staples, and Wal-Mart; $34.98 at the SJSU Spartan Bookstore). Some class activities will use the advanced features of this calculator. You may also use a graphing calculator (although they are more than you need for this course). Other scientific calculators may work if they offer the ability to calculate statistics based on a stored list.


**SPSS**
Many assignments will require you to perform analysis outside of class using SPSS. For these assignments, I will provide step-by-step instructions.

To use SPSS, it is intended that you use the computers in the Statistics Lab located in DMH 350. These computers are equipped with SPSS and graduate student teaching assistants can provide you with assistance on how to use the program. They will not do
your assignments for you. See the Statistics Lab to determine its hours of operation for this semester.

Optionally, you can purchase a copy of SPSS for $15 at the University Help Desk on the first floor of Clark Hall. Be sure to get the newest SPSS license code for the operating system you own.

**Flash Drive and Laptop (optional)**

A flash drive is helpful for taking your work between class and the statistics lab. You are welcome to bring a laptop computer to class, but a laptop is not required. Laptops can only be used during class for course-related work. Instead of bringing a laptop, you can print your SPSS outputs and bring the printouts to our class meetings.

**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), 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](http://www.sjsu.edu senate/docs/S12-3.pdf).

It is essential that you allocate time for this course (at least 6 hours per week) and do the following every week:

- Check Canvas and your e-mail for course announcements and changes.
- Check the syllabus for due dates and upcoming assignments and plan accordingly.
- Review the weekly handout.
- Complete the weekly quiz.
- Attend both class meetings.
- Complete the weekly in-class activity that corresponds with the lecture.
- Look up unclear concepts in your textbook and/or read the chapter, as needed.
- Ask your instructor, via e-mail or during office hours, about anything that remains unclear.

**Grading Scale**

Grades are assigned based on your final point total (out of 1000 points for the semester):

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A+</td>
<td>&gt; 949</td>
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<tr>
<td>A</td>
<td>920 - 949</td>
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</table>
Grades will be available to you on Canvas throughout the semester.

**Course Requirements and Assignments**

**In-Class Activities**

*In-class activities are 20% of your final grade (200 points total).*

Typically, our second class meeting each week will be dedicated to completing an in-class activity. The in-class activities are designed to give you hands-on practice with the techniques discussed in the lecture and handouts.

In-class activities are graded (quite strictly) for completion. Incomplete or blatantly effortless work will not be accepted. **There are no make-ups or late submissions of in-class activities for any reason.** Instead, your lowest in-class activity grade will be dropped. Because the reason for missing them does not matter, it is important that you do everything you can to be present for all in-class activities, even if you don’t anticipate getting sick, having an emergency, etc.

Some of these activities require preparation before class (for example, you may be asked to perform analysis in SPSS and bring the output to class). To complete the activity and receive points for it, you must come to class with these preparation activities already completed. Any required preparation will be posted to Canvas.
Quizzes

Quizzes are 20% of your final grade (200 points total).

Twelve quizzes are worth 20 points each, but the lowest two are dropped. This leaves 10 quizzes worth 20 points each, for a total of 200 points. Most weeks, a quiz will be assigned within Canvas. You may use support materials (your textbook, web sites, and your notes) when you take your quiz, but you must take your quiz alone without the help of any other live individual. You may not communicate with anyone except the instructor during a quiz. For example, you may refer to the web page of a free stats textbook during a quiz, but you may not send instant messages to someone while you take a quiz.

As with in-class activities, there are no make-ups or late submissions of quizzes for any reason. Instead, your lowest two quiz grades will be dropped. Because the reason for missing them does not matter, it is important that you take each quiz early.

In summary: books and notes are okay for quizzes. Live help is not okay for quizzes. Please let me know if you have questions about what is allowed during quizzes or exams.

Exams

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

Four exams are worth 150 points each. Although later content builds on earlier content, the exams are not cumulative. You will be allowed to use your textbook and notes on quizzes and exams. However, no electronic devices other than a calculator will be allowed.

Make-Up Exams

Make-up exams will only be given in exceptional, unforeseen, and unavoidable circumstances with written documentation. Examples of exceptional circumstances are health emergencies, religious obligations, and military service. Work scheduling is not a sufficient reason for an exam make-up. You must notify the instructor that you are unable to take the exam as soon as you become aware of the need for a make-up. If the need for a make-up is known before the exam, the exam must be taken early. Make-up exams will be scheduled based on instructor availability.

Extra Credit

Your grade should reflect your performance in the course over the entire semester. For this reason, there are only two opportunities for extra credit.

First, a quiz is available during the first week of class on Canvas. The quiz is about this syllabus. Your highest score on the quiz (you may take it multiple times) will count as up to 20 points of extra credit.

Second, there may be a small number of extra credit questions at the end of some exams. These questions are designed to be challenging and reward true mastery of the course material.
Course Policies

Classroom Conduct
We will be working in groups often. The success of your group depends on respect for everyone involved. Specifically:

• Come to class having read the assigned material. Showing up unprepared is unfair to the rest of your group and will waste your time as well.

• 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.

• There are many of us working in a relatively small space, so be mindful of your volume.

Grade Checks
Your current grade is available to you on Canvas throughout the semester. You are free to use the Canvas printout as a record of your current progress in the course. If you need a signed grade check, then please bring the grade check form and a printout of your current Canvas grade to my office hours. Grade checks are only available during office hours. Under Federal privacy laws, I cannot e-mail grades to you at any time.

Recording Lectures
University Policy S12-7, http://www.sjsu.edu senate/docs/S12-7.pdf, requires students to obtain instructor’s permission to record the course.

Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class, and authorized recording is for the general lecture time only. Group work may only be recorded with permission of all group members. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his approval. You may not publicly share or upload instructor-generated material for this course such as quiz or exam questions, lecture notes, or homework solutions without instructor consent.

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 Jose State University. The University Academic Integrity Policy S07-2 at 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 all 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/.

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) may result in a failing grade in the course 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 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 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.

In 2013, the Disability Resource Center changed its name to be known as the Accessible Education Center, to incorporate a philosophy of accessible education for students with disabilities. The new name change reflects the broad scope of attention and support to SJSU students with disabilities and the University’s continued advocacy and commitment to increasing accessibility and inclusivity on campus.

**About Diversity**
Consistent with the mission of San Jose 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 Jose State University will provide the opportunity to gain knowledge and experiences necessary to thrive in a diverse, global environment.
Additional Resources

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 student use are available in the Academic Success Center at http://www.sjsu.edu/at/asc/ located on the 1st floor of Clark Hall and in the Associated Students Lab on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library.

A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.

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 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. For additional resources and Intermediate Statistics (STAT 115), Spring 2014

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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

**Wellness Workshops**
Attending to your wellness is critical to your success at SJSU. Now 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 current course schedule is available on Canvas and should be considered part of this syllabus.

*Please refer to the current course schedule on Canvas instead of the one printed below.*

*In-class activities are due at the end of class on Thursday.*  
*Quizzes are due at the start of class on Thursday.*

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics</th>
<th>see Handout</th>
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<tbody>
<tr>
<td>1</td>
<td>Thu. Jan. 23</td>
<td>Introduction, Measurement review, Intro to SPSS</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Tue. Jan. 28 Thu. Jan. 30</td>
<td>Visualizing data, Descriptive statistics review</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Tue. Feb. 4 Thu. Feb. 6</td>
<td>Descriptive statistics review, continued</td>
<td>3</td>
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</tbody>
</table>
| 4    | Tue. Feb. 11 Thu. Feb. 13 | Exam 1 (Tue.)  
The normal distribution (Thu.) | 4           |
| 5    | Tue. Feb 18 Thu. Feb 20 | Standardizing, Probability | 5           |
| 6    | Tue. Feb 25 Thu. Feb 27 | Sampling distributions, Estimation | 6           |
| 7    | Tue. Mar. 4 Thu. Mar.6 | Hypothesis testing, Power and errors | 7           |
| 8    | Tue. Mar.11 Thu. Mar.13 | T-tests | 8           |
| 9    | Tue. Mar.18 Thu. Mar.20 | Exam 2 (Tue.)  
Correlation (Thu.) | 9           |
<p>| 10   | Tue. Mar.25 Thu. Mar.27 | Spring Break |             |
| 11   | Tue. Apr. 1 Wed. Apr. 3 | Regression | 10          |
| 12   | Tue. Apr. 8 Thu. Apr. 10 | One-way ANOVA | 11          |</p>
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<th>Date 2</th>
<th>Topic</th>
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<tbody>
<tr>
<td>13</td>
<td>Tue. Apr. 15</td>
<td>Thu. Apr. 17</td>
<td>One-way ANOVA, continued</td>
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<tr>
<td>14</td>
<td>Tue. Apr. 22</td>
<td>Thu. Apr. 24</td>
<td>One-way ANOVA review (Tue.) Exam 3 (Thu.)</td>
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<tr>
<td>15</td>
<td>Tue. Apr. 29</td>
<td>Thu. May 1</td>
<td>Two-way ANOVA</td>
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<tr>
<td>16</td>
<td>Tue. May 6</td>
<td>Thu. May 8</td>
<td>Two-way ANOVA, continued</td>
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<tr>
<td>17</td>
<td>Tue. May 13</td>
<td></td>
<td>Chi-Square</td>
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|    | Final       | Mon. May 19 | Exam 4
             |             | Monday, May 19
             |             | 12:15 – 2:30 pm |