

**Course Code & No. - Section:** PSYC 415 – Section 1  
**Course Title (Credits):** Research Methods in Behavioral Science  
**Term & Year:** Fall / 2014  
**Course Ref. No. (CRN):** 80044

**Instructor:** Christina Frederick, Ph.D.  
**Phone(s):** X 7460  
**Email:** cfrederick@sierranevada.edu  
**Office:** Prim 305  
**Office Hours:** M 10:00 am - 11:30 am  
T 2:30 pm - 4:00 pm  
W 10:00 am - 11:30 am

**Statistics Consultant:** Steve Ellsworth, Ph.D.  
Cell: 775-742-9480 (call/text)  
sellsworth@sierranevada.edu

**Class Meeting Time:** MW 2:00 pm – 3:45 pm  
**Location:** PL213

**Prerequisites (from Catalog):** PSYC 101; MATH 251  
**Corequisites (from Catalog):** Senior class standing

## COURSE DESCRIPTION

Critical evaluation of many forms of research efforts in the behavioral sciences, including both qualitative and quantitative methodologies. The advantages and liabilities of numerous methods, including laboratory experiments, surveys, and field studies are examined. Published research studies are critiqued.

## STUDENT OUTCOMES

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

1. Identify the limitations and advantages of various research methodologies
2. Critically analyze common errors in the research process
3. Design a research project
4. Critique others' research
5. Demonstrate greater proficiency in the use of APA style

## METHODS OF ASSESSING STUDENT OUTCOMES

Student outcomes will be assessed using the following:

1. Class attendance and participation
2. Written take home assignments
3. Research proposal
4. Quizzes and other in-class writing activities
5. Closed-book midterms and final exams covering material in the textbook and described in the class schedule

## INSTRUCTIONAL STRATEGIES

This class will utilize lectures, small groups, inquiry learning, in-class discussions, videos, homework assignments, quizzes, and exams. Bring your laptop computer to class everyday.

## REQUIRED TEXTS AND MATERIALS

1. Cozby, P.C. (2012). *Methods in Behavioral Research* (11<sup>th</sup> ed.). Boston, MA: McGraw-Hill. (ISBN: 0078035155)
2. *Publication Manual of the American Psychological Association* (6<sup>th</sup> ed.). (2010). Washington, DC: American Psychological Association. (ISBN: 1-4338-0561-8)
3. Laptop computer (one that meets the published SNC Laptop Requirements)

## RECOMMENDED TEXTS AND MATERIALS

1. Online Resource Center for *Methods in Behavioral Research*: [www.mhhe.com/cozby11e](http://www.mhhe.com/cozby11e)
2. Aaron, J. (2010). *The Little, Brown Compact Handbook* (7<sup>th</sup> or 8<sup>th</sup> ed.). New York, NY: Pearson. (ISBN: 978-0-205-65163-4)

## ATTENDANCE

Attendance and participation are essential to the learning process. Students are expected to attend all scheduled meetings ON TIME and provide NO interruptions (e.g., cell phones, facebook, etc.). Attendance will be recorded at the *beginning* of each class. You are expected to be on time as well as stay for the entire period. Roll will be taken every day. If you choose not to attend class, arrive tardy, or depart early, you will be at an academic disadvantage.

Credit is available based on your attendance and participation. You will lose points for any missed classes (or portion thereof). Excused and unexcused absences are BOTH considered an absence from class and are counted toward the total number of absences in the course. Excessive tardiness and/or repeated disrespect of classroom rules (e.g., use of cell phones) will be penalized by a reduction of your final attendance/participation score.

Being late may cause you to miss important announcements, context, and content. If you arrive late, *it is your responsibility* to be sure you have been counted present for the day before leaving. Additionally, *you must see me before leaving class to be counted present for the day*. If/when you miss class, you remain responsible for notes and handouts (see a classmate for notes; see me for handouts). I urge you to attend office hours in the event of a missed class. Missing even one class session could significantly impact your grade.

I adhere strictly to Sierra Nevada College policy regarding excessive missed classes.

## RESEARCH PROJECT

This course is the first in a two-part series that requires a research project involving human or animal participants. You will be required to make a submission for research project approval to the Institutional Review Board. YOUR performance in this class is dependent on YOUR maintenance and motivation regarding this assignment and the completion of others throughout the course. While some classwork time will be provided throughout the semester, you will need to work on all projects outside of class to maximize performance.

## STATISTICAL CONSULTANT

Steve Ellsworth, Ph.D. is an integral part of our course as our statistical consultant. His contact information is at the beginning of this syllabus. He should be contacted with questions regarding methodological design and statistical procedures. Also, while his guest lectures are not listed on the syllabus because he is concurrently instructing another course, he will be present in our course throughout the semester. We will adjust our schedule according to his availability.

## INFORMATION LITERACY STATEMENT

Using the library's resources effectively (not just the Internet) contributes to developing each of SNC's core themes by exposing students to high quality academic resources, diverse opinions, new ideas, and a future that includes building on a liberal arts education. In this course, you will be expected to utilize the library's resources (either on-site or remotely) as you complete your assignments.

## CLASS REQUIREMENTS

1. Attendance: See Attendance section (*above*) and specific reference to attendance in the grading policy (*below*).
2. Reading: Students are expected to do the assigned reading *before* class meets to ensure preparation for discussions and learning activities.
3. Participation: Thought questions, discussions, and in-class activities may provide opportunities for students to earn participation points throughout the semester.
4. Students are required to take all exams and turn in all assignments on the scheduled dates. NO makeup exams will be allowed and no late assignments will be accepted.
5. ALL cell phones are to be turned off or silenced prior to entering the classroom. Cell phones are *not* to be used for any purpose (e.g., talking or texting). If I see a cell phone I will ask you to put it away; if I see the phone a second time, you can pick it up from me at the end of class and you forfeit your participation credit for the day. If there is a major emergency requiring cell phone use, please exit our classroom immediately and do not return during the class period. In this case, even if this occurs in the last 5 minutes of class, you will forfeit your attendance and participation credit for the day. This absence will be treated like any other; the student will not be excused from any work due to the missed class.
6. Computer use restricted to that pertinent to class *only* (i.e., no facebook, no twitter, YouTube, etc.). Consequences are dire and Dan O'Bryan-esque.

## SANCTIONS FOR CHEATING AND/OR PLAGIARISM

Plagiarism is defined as, "passing off a source's information, ideas, or words as one's own by omitting to acknowledge the sources" (Teuber & Andreas, 1999). This refers to all sources of information, including the Internet.

To avoid plagiarizing, a good rule is to use quotation marks whenever a string of three or more words is copied from another source (e.g., when taking notes from a journal article). Simply paraphrasing and citing a source may not be enough to avoid plagiarizing, however. For example, one of the paragraphs in a paper might be a close paraphrase of a paragraph from another source. Even if the source is cited, the structure of the original source has been plagiarized! Starting with an outline of arguments to be included in a paper and then using information from other sources to back up these arguments should help one avoid plagiarizing in this manner.

Any form of cheating, plagiarism and/or unauthorized use of anything other than the student's own resources *will not be tolerated*. To be clear, unless explicit written or verbal instructions indicate otherwise, exams and assignments are to be completed individually (i.e., without any collaboration). The instructor will pursue the maximum disciplinary action against the student violating this protocol. I have a strict no tolerance policy. Additionally, if you are caught cheating, you will earn an automatic 0 on that exam/assignment/etc.

Some examples of cheating include, but are not limited to, copying from a classmate's work during an exam, turning in work that is not your own, and using any unapproved aid during an exam.

Both intentional and unintentional plagiarism, as well as any suspicion of cheating, will be reported to the Vice President of Academic Affairs/Provost. I strongly encourage all students to meet with me to discuss this issue before turning in written work.

*No ball caps, cellular telephones, pagers, earbuds, headphones, extraneous paper, notes, etc. are permitted during any and all periods of assessment (e.g., exams, quizzes, in class assignments, etc.). If I spot one of these present (even if you are not using it) during an unapproved period, you will take an automatic 10% reduction on the assessment in question. In the case I witness the use of such unapproved apparatus, you will receive a 0. Yes, this means you will need to use a watch rather than your cell phone for the time.*

## THE HONOR CODE

Our faculty believes students must be held to high standards of integrity in all aspects of college life to promote the educational mission of the College and to encourage respect for the rights of others. Each student brings to the SNC community unique skills, talents, values and experiences which, when expressed within the community, contribute to the quality of the educational environment and the growth and development of the individual. Students share with members of the faculty, administration and staff the responsibility for creating and maintaining an environment conducive to learning and personal development, where actions are guided by mutual respect, integrity, responsibility and trust. The faculty and students alike must make diligent efforts to ensure high standards are upheld by their colleagues and peers as well as themselves. Therefore, faculty and students accept responsibility for maintaining these standards at Sierra Nevada College and are obligated to comply with its regulations and procedures, which they are expected to read and understand.

## CONSEQUENCES OF VIOLATING THE STUDENT HONOR CODE

SNC students and faculty share the responsibility for maintaining an environment of academic honesty. Thus, all are responsible for knowing and abiding by the SNC Faculty/Student Honor Code published in the current SNC Catalog. Faculty are responsible for presenting the Honor Code and the consequences of violating it to students at the start of their classes AND for reporting all incidences of academic dishonesty to the Provost. Students are responsible for knowing what constitutes CHEATING, PLAGIARISM and FABRICATION and for refraining from these and other forms of academic dishonesty. Violations of the Honor Code become part of a student's academic record.

- 1<sup>st</sup> Offense: Student receives a zero for assignment/exam and counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.
- 2<sup>nd</sup> Offense: Student fails course and receives counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.
- 3<sup>rd</sup> Offense: Student is expelled.

## GRADING POLICY

### 1. Attendance & Participation:

Credit is available based on your attendance and participation. Refer to the Attendance section above for details regarding my expectations. You will lose points for any missed classes (or any portions thereof) and any days for which you are viewed to not be participating in group or class discussions (e.g., on your cell phone).

*These are the easy points, get them all. =>*

### 2. Assignments and Quizzes:

This class incorporates assignments and quizzes. Several are briefly covered on the course calendar provided (end of this document) and will be detailed in class. *No make-ups or late assignments will be accepted without prior instructor approval.* Budget your time to complete written assignments by their due date and attend class at all times, particularly on activity days. *Do not submit assignments via email unless you have received prior approval or the request has been made of you to do so.* Do not submit assignments via email unless you have received prior approval or the request has been made. In the case you will be absent when an assignment is due, have a classmate turn in for you (you can return the favor for them) or email it to me on time (time stamp) AND bring the printed copy (for grading) when you return.

### 3. Examinations:

There are two non-cumulative exams. You should be particularly familiar with all terminology discussed in class, but anything in the text is fair game (unless otherwise indicated). Exams stress application over memorization. You will be required to use your understanding of psychological concepts to identify examples, distinguish between related concepts, and apply course material to real world issues.

Exam format is multiple choice and short answer. Be sure to select the *best* answer.

All students are required to take exams on the scheduled days/times (see course timeline for dates). Students *must* take *all* exams. *In the unlikely event of a missed exam, and only with instructor approval based on verifiable documents, the make-up exam will occur after the final exam.* Only one exam can be made up. If you miss more than one, see me about the status of your grade and/or your plans for re-taking the course at a later date. The date and time of the final exam should be scheduled and prioritized. *There will be no final exam make-up.*

Please note that in the event of possible Academic Honor Code violations, I reserve the right to administer individual oral exams.

4. **Final Grades:** Based on the number of points earned from quizzes, assignments, exams, class participation, and attendance.
5. **Grading scale:** Grades will be assigned on a strict percentage scale and are *non-negotiable*.

A+ : $\geq 99\%$	B : 82.1 - 87.9%	C- : 70.0 - 72.0%
A : 92.1 - 98.9%	B- : 80.0 - 82.0%	D+ : 68.0 - 69.9%
A- : 90.0 - 92.0%	C+ : 78.0 - 79.9%	D : 62.1 - 67.9%
B+ : 88.0 - 89.9%	C : 72.1 - 77.9%	D- : 60.0 - 62.0%
		F : < 60.0%

## ADA ACCOMMODATIONS

In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 (x7534), [hconover@sierranevada.edu](mailto:hconover@sierranevada.edu), or go to the OASIS offices on the third floor of Prim Library during the first week of the semester.

Please inform me as soon as possible if you have a professionally diagnosed and certified disability. Be sure to obtain the proper paperwork and inform me of any required accommodations at least 72 hours *before* scheduled exams, quizzes, papers, assignments, etc. Depending on the type of accommodation, time may be required for me to meet your needs (e.g., private room for exams).

## THE SNC EMAIL SYSTEM

The SNC email system is the official communication vehicle among students, faculty members and administrative staff. It is designed to protect the confidentiality of student information as required by the Family Educational Rights and Privacy Act of 1974 Act (FERPA). Students should check their college email accounts daily during the school year.

Students have a right to forward their SNC e-mail to another e-mail account (for example, @hotmail or @gmail). However, confidentiality of student information protected by FERPA cannot be guaranteed for SNC e-mail forwarded to an outside vendor. Having email redirected does not absolve a student from the responsibilities associated with official communication sent to his or her SNC email account.

## THE MISSION STATEMENT

Sierra Nevada College graduates will be educated to be scholars of and contributors to a sustainable world. Sierra Nevada College combines the liberal arts and professional preparedness through an interdisciplinary curriculum that emphasizes entrepreneurial thinking and environmental, social, economic and educational sustainability.

## THE CORE THEMES


Liberal Arts


Professional Preparedness





Entrepreneurial Thinking

Sustainability


## CLASS SCHEDULE

DATE	TOPIC	READING	ASSIGNMENTS/ ACTIVITIES	OTHER
MON 8/18	Syllabus, Introduction, & Peer Groups	Chapter 1	Syllabus Peer Group Definition	
WED 8/20	Scientific Understanding of Behavior	Chapter 1	<i>Index card</i> (5 pts) Peer Group Activity  Guest Lecture: Cindy Conover	
MON 8/25	Scientific Understanding of Behavior	Chapter 1	<i>Bring printed empirical journal article I</i> (5 pts)  Mini-lecture on APA references and citations	
WED 8/27	Plagiarism/ Reading Research Articles  Writing Research Reports  Scientific Understanding of Behavior	APA Manual  Appendix A  Chapter 1	<i>Research article summary assigned (basic)—Bring article you plan to summarize for approval</i> (5 pts)  In-class activity examining commonalities among articles brought to class	Bring APA Manual  Continue Brainstorming
9/1*	<b>College Closed</b>			<i>LABOR DAY!</i>
WED 9/3	Scientific Understanding of Behavior  Where to Start	Chapter 1  Chapter 2	Assign proposal outline  Small group/entire class brainstorming	Presentation Debrief
MON 9/8	Guest Lecture: TBA  Where to Start	Chapter 2	<i>Bring printed empirical journal article II as per new instructions</i> (5 pts)  <i>Draft I of research article summary</i> (5 pts)	<i>Distribute Article Summary assignment</i>  <i>Thoughtful peer feedback on article summary (participation)</i>

WED 9/10	Where to Start	Chapter 2 Quiet Rage	<b><i>Research question write-up due with feedback space provided—must be present to provide peer feedback/critique</i></b> (5pts question/5pts feedback = 10 pts total)	
MON 9/15	Where to Start	Chapter 2	<b><i>Final draft of research article summary</i></b> (25 pts) Assign Q & A on proposal (participation)	Bring APA Manual
WED 9/17	Writing Research Reports/APA Style  Where to Start	Appendix A  Chapter 2	APA Quiz  Proposal work time/feedback/brainstorm	Bring APA Manual
MON 9/22	Ethical Research	Chapter 3	Proposal questions/work time	
WED 9/24	Ethical Research  Fundamental Research Issues	Chapter 3  Chapter 4	<b><i>Detailed Proposal Outline based on presentation peer/instructor feedback</i></b> (50 pts)	Brainstorm Observational Activity
9/25 or 9/26*				<i>Junior English Proficiency Test</i>
MON 9/29	Fundamental Research Issues	Chapter 4		
WED 10/1	Fundamental Research Issues	Chapter 4		
MON 10/6			<b><i>EXAM I</i></b> <b><i>(Chs 1-4, App A)</i></b> (~ 50-60 pts)	
WED 10/8	Measurement Concepts/APA	Chapter 5		Steve Ellsworth talk (1 hour) (tentative)
MON 10/13	Measurement Concepts/APA	Chapter 5	<b><i>Student proposal presentations/feedback</i></b> (50 pts)	Bring APA Manual  Happy Columbus Day! 
WED 10/15	Measurement Concepts/APA	Chapter 5	<b><i>Student proposal presentations/feedback</i></b>	<i>Midterm grades filed with Registrar</i>

MON 10/20	Observational Methods	Chapter 6	Observational method activity	Proposal: Introduction Q & A
WED 10/22	Observational Methods	Chapter 6	<b><i>Draft: Proposal Introduction</i></b> (20 pts)  <b><i>Bring printed empirical journal article (w/ detailed method section) related to your research question</i></b> (5 pts)	
MON 10/27	Individual student conferences with instructor regarding proposal method	Chapter 6		Spring Advising (October 27- November 7) <i>Last day to change grade status or drop w/o academic penalty</i>
WED 10/29	Observational Methods	Chapter 6	<b><i>Draft: Proposal Method</i></b> (20 pts)	Assign reading for journal article critique
FRI 10/31*	<b>College Closed</b>			Nevada Day Halloween
MON 11/3	Survey Research	Chapter 7	IRB Application Tutorial	
WED 11/5	Survey Research	Chapter 7	<b><i>Group Journal Article Critique</i></b> (10 pts)	
MON 11/10	Survey Research	Chapter 7	IRB Application Discussion and Follow-up	
11/11*	<b>College Closed</b>			<i>Veteran's Day</i>
WED 11/12	Experimental Design	Chapter 8		
11/12*				<i>May/August graduation petitions due</i>
11/12-11/14*				<i>Spring 2015 Registration 11/12-11/14</i>
11/15*				<i>Weather makeup day</i>
MON 11/17	Experimental Design	Chapter 8	<b><i>Draft: Proposal Discussion</i></b> (20 pts)	
WED 11/19	Experimental Design Conducting Experiments	Chapter 8 Chapter 9		Experimental Design--Final Revisions  IRB application



<i>11/24-11/28</i>	<b>College Closed</b>			Happy Thanksgiving!!!
MON 12/1	Conducting Experiments	Chapter 9	Conduct experiment designed as class, with class, and do basic statistics as group  OR  Journal Article Critique (choice based on need)  OR  Catch-up Day  Course Evaluations	Proposal classwork time – non-peer groups rotate for constructive feedback
WED 12/3	2:00 pm – 3:15 pm: Exam  3:15 pm – 3:45 pm: Proposal Final Draft in-class work/ Q&A		<b><i>Proposal final draft</i></b> (100 pts);  <b><i>EXAM II</i></b> <b><i>(Chs 5 – 9)</i></b> <b><i>(~ 50-60 pts)</i></b>  <b>STUDENT PROPOSAL PRESENTATIONS START?</b>	Do not leave after completing the test   Proposal Presentation classwork time— instructor available
<i>12/8</i>	<b>No Class</b>			<i>Prepare for Finals</i>
12/9-12/13	Final Exam: TIME TBA  Presentations & Q&A		<b><i>STUDENT PROPOSAL PRESENTATIONS</i></b> (100 pts)  <b><i>IRB Application Draft I due</i></b> (20 pts)	Participation noted and incorporated in proposal grade  *Do not leave after you finish the test or your presentation. Let's be fair to everyone!
				<i>Final grades filed with Registrar</i>
				<i>Semester ends</i>

\* *Italicized/darkened dates reflect days we do not have class, but for which there are special reminders.*

### **MOST IMPORTANTLY**

My office hours are for your benefit. Please take advantage of this and come by. You can come to clarify information from class, get help on assignments, get exam study tips, or just to get to know one of your professors. I am in my office for you. This in mind, I hope to see each student at least once over the course of the semester. Please do your best to visit me during my open office hours, however, if you are absolutely unable to visit during those times, contact me for an appointment. I am looking forward to a fun and educational semester with all of you! Please feel free to ask questions as they occur to you. Most of all, let's have fun!

**NOTE: SYLLABUS IS TENTATIVE AND SUBJECT TO CHANGE. CHANGES WILL BE ANNOUNCED IN CLASS.**