

<b>Course Code &amp; No. - Section:</b>	BIOL 301,305 - Section 1
<b>Course Title (Credits):</b>	Animal Behavior and Lab (3+1)
<b>Term &amp; Year:</b>	Fall / 2017
<b>Course Ref. No. (CRN):</b>	80260 +80261
<b>Instructor:</b>	Dr. Chuck Levitan
<b>Phone(s):</b>	775 831 1314 x7455
<b>Email:</b>	<a href="mailto:clevitan@sierranevada.edu">clevitan@sierranevada.edu</a>
<b>Office:</b>	2 <sup>nd</sup> floor TCES – 224
<b>Office Hours:</b>	MW 9:00-10:00, 11:15-12:0 or by appointment
<b>Class Meeting Time:</b>	MW 10:00 – 11:15 p.m., W 1:00-3:45
<b>Location:</b>	TCES, room 205
<b>Prerequisites (from Catalog):</b>	ENVS 200
<b>Corequisites (from Catalog):</b>	



(Satin bower bird courtship, [http://biosci.ucdavis.edu/images/Satin\\_bowerbird\\_courtship.jpg](http://biosci.ucdavis.edu/images/Satin_bowerbird_courtship.jpg))

## Course Description

Behavior of animals from ecological and evolutionary perspectives, with emphasis on the importance of field environments. Includes an introduction to the concepts of ethnology and sociobiology as they apply to both animals and humans.

## Student Outcomes

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

1. Describe how a behavior may increase the fitness of an organism
2. Differentiate between the proximal and ultimate causes of a behavior
3. Create an experiment to reveal the contribution of a behavior to fitness
4. Design a methodology for revealing the fitness basis of a behavior
5. Pose hypotheses for the fitness basis of a behavior

## Methods of Assessing Student Outcomes

Student outcomes will be assessed using the following:

1. Quizzes and CPA's
2. Assignments of increasing levels of challenge ;
3. Writing assignment(s), submitted in stages, both based on library and lab work;
4. Written in-class, closed-book (with review sheet) examinations;
5. Projects done in the field and classroom.
6. Written in-class, closed-book (with review sheet), comprehensive final examination.

## Instructional Strategies

This class will utilize lectures, movies, lab work, small groups, and individual work in class using laptop computers, inquiry learning, case studies, and homework assignments. The course makes use of the *Moodle* course management system.

## Required Texts and Materials

1. *Animal Behavior*; Tenth Ed., John Alcock, Sinauer: 2013 ISBN 978-0-87893-966-4
2. Laptop computer: Browser, Word & Excel & PowerPoint, or Open Office ([www.openoffice.org](http://www.openoffice.org))

## Attendance

Attendance will be taken for scholarship purposes and it is recommended that you attend each class. Students are required to be in class promptly and ready to learn and participate at the scheduled meeting time. Tardiness will not be tolerated. After three unexcused misses I'll not accept any extra credit.

## Prim Library Resources

Using the library's resources effectively (not just Internet resources) 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.

Prim Library Resources for ENVS 200 and ENVS 205: Environmental Systems include, but are not limited to:

1. Electronic databases (for peer-reviewed research articles, reviews, newspaper and magazine articles): Electronic databases most likely to include articles related to your term paper topics are EBSCO: Academic Search Premier, Environment Complete, General Science Collection, GreenFILE, Health Source, Newspaper Source, and TOPICsearch; BioOne; and GREENR.
2. Hardcopy periodicals: Prim Library has current subscriptions for Science, New Scientist, Science News, and National Geographic Magazine. Any of these are likely to have articles on your term paper topic. Full-text articles from many more periodicals are available through the electronic databases.
3. Lib Guides: <http://Libguides.sierranevada.edu> These web pages contain instructions about how to use resources available at Prim Library, how to evaluate the appropriateness of information from the Internet for a research paper, how to cite sources, and other topics related to finding and using information.

## Sanctions for Cheating and/or Plagiarism

### The Honor Code

The faculty of SNC believes students must be held to high standards of integrity in all aspects of college life in order 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. If writing is turned in by you, without citation or shared credit, it means you wrote it. Any shared work should be credited, paragraph by paragraph.

### 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.

### **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 within the first week of the semester.

### **The SNC Email System**

The SNC email system is the official communication vehicle among students, faculty members and administrative staff and 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 Sierra Nevada College 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 Requirements**

Assignments are due at the beginning of class. Students are required to bring a hard copy of CPA assignments to class, emailed copies for me are acceptable. CPA's and quizzes accepted on time only. A letter grade will be deducted for each day projects are late. Students are required to bring laptops to class, however laptops and phone are to remain off unless otherwise noted. Please dress appropriately and be prepared to spend some time outside. Students may be asked to offer cars for car-pooling; gas expenses will be compensated.

### **Quizzes, CPA's**

Students are required to take at least 10 online quizzes throughout the course. A total of 13 quizzes will be posted giving the student opportunity to miss as many as 3 quizzes. Students can take more than 10 quizzes, at which point the best 10 scores will go towards your grade. Quizzes will be posted to the course Moodle site each Monday by 9:00 am and will remain available until the following Friday at 5:00 pm. Once a quiz is closed it will remain closed. It is the student's responsibility to gain access to Moodle. They cover material already discussed or reading assigned in advance. [Sncmoodle.sierranevada.edu](http://Sncmoodle.sierranevada.edu) (note the new Moodle web address).

### **Lecture Preparation Assignments**

LP's Or Lecture Preparation Assignments, are a set of essay questions or short-answer questions based on material for the week ahead. They will all be discussed during the week. Students must turn in a total of 10 out of 12 lecture preparation assignments, assigned each week and due the following Monday. The best 10 grades will go towards your grade. LPs will be graded cursorily on content and rigor; many will not be returned with comments.

## Projects

A total of 4 projects will be given during the semester. Each project will correspond to the section in the lecture. Assignments will be introduced at the start of each new course section and are due at the end of each section (see Class schedule).

## Labs

A total of 6 labs will be written during the semester. They will represent several lab sessions.

## Tests

A total of 4 tests, 3 during the semester and one in the finals period, as an exam on last material and a cumulative exam. All scores will be included in final grade.

## Grading Policy

Assignment	Points	Number		When Due	
Lect. Prep	10	10 of 12	100	Monday before class	
Quiz	10	10 of 12	100	Wednesday before class	
Test	100	4	400	As scheduled	
Projects	50	4	100	Before class, as scheduled	
Major Project	50	1	150	Several deadlines, final in finals period	
Labs	25	6	150	As scheduled	
	<b>TOTAL</b>	<b>35</b>	<b>1000</b>		

Week	Week of:	Topic	Alcock	Project	LP (Due Wednesday)	Best “Trials of Life”
1	8/21/17	Evolution, Altruism and haplodiploidy	1 An Introduction to Animal Behavior 2, Behavioral Ecology and the Evolution of Altruism	Prisoner’s Dilemma, Relatedness		
2	8/28/17	Hymenoptera & haplodiploidy Altruism & Evolution, Culture	2,3 Altruism, Experimental Method	Scenarios of relatedness	1.2, 1.4, 2.1, and 2.2 (Monday) 2:7,9, 12 (Wednes.)	Friends and Rivals
3	9/4/17	Behavioral Ecology and the Evolution of Social Behavior	3. The Evolution of Social Behavior		3:1,2	Living Together
4	9/11/17	The Evolution of Social Behavior	3 The Evolution of Social Behavior, demes Culture (reading)	<b>Test 1</b>	3:5,8,11	Finding Food Fighting
5	9/18/17	The Evolution of Communication	4 The Evolution of Communication		4:1,3,11	Talking to Strangers
6	9/25/17	Avoiding Predators and Finding Food,	5 Avoiding Predators and Finding Food		5:4,9,13, 18(for Tuesday)	Hunting and Escaping
7	10/2/17	Predation, Optimization	6 The Evolution of Habitat Selection, Territoriality, and Migration	Project 1	6:3,5,11, plus custom	Continuing the Line Home Making
8	10/9/17	The Evolution of Habitat Selection, Territoriality, and Migration	6 The Evolution of Habitat Selection, Territoriality, and Migration	<b>Test 2</b>		Finding the Way
9	10/16/17	The Evolution of Reproductive Behavior	7 The Evolution of Reproductive Behavior		7:2,9,13,16	Home Making

10	10/23/17	The Evolution of Mating Systems	8 The Evolution of Mating Systems	Project 2	8:3,9, Custom	Growing Up Continuing the Line
11	10/30/17	The Evolution of Parental Care	9 The Evolution of Parental Care	Project 3	9:1,5,8,11,16	Courting Arriving
12	11/6/17	Culture and the Study of Behavior Proximate and Ultimate Causes of Behavior,	10,11 Proximate and Ultimate Causes of Behavior, The Development of Behavior	Test 3	10: 2,6; 11:4,10	
13	11/13/17	Senses, light and sound processing Evolution, How Neurons and Hormones Organize Behavior,	12 Evolution, Nervous Systems, and Behavior	Project 4	12:3,9	
14	11/20/17	<b>Thanksgiving</b>				
15	11/27/17	Evolution of Human Behavior	13,14 The Evolution of Human Behavior Culture and Humans		13:1,9 14:2,4,8	
	12/4/17	FINALS		Test 4		