

# ANIMAL BEHAVIOR ONLINE

## Zoology 140

### COURSE SYLLABUS

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**Course Focus.** This course will introduce students to the basic concepts of animal behavior. By the end of the semester, students will have a general understanding of invertebrate and vertebrate behavior, including learning, foraging strategies, sexual selection, mating systems, social behavior and the evolutionary mechanisms that guide it.

This is a three-unit non-major's biology course which satisfies the SBCC General Education requirement in Natural Sciences. This course is transferable to the UC & CSU as a general education life science course. Biology majors are welcome to take this course, however they will not receive credit toward their major for this course.

#### **Supplies.**

**Textbook:** *Animal Behavior: Concepts, Methods and Applications*, by Nordell & Valone, 2014. All readings from this text are designated "N&V" on the schedule and in Canvas.

**SimUText:** Darwinian Snails. Evolution and natural selection interactive tutorial. This online tutorial is required and is available to purchase at SimUText. The cost is \$5. A link and directions for how to purchase it can be found by clicking on "SimUText Natural Selection tutorial" under "assignments" in Canvas.

#### **Course Requirements.**

**Quizzes.** There will be 10 quizzes, worth 10 points each, which are designed to assess your basic understanding of each topic as well as to make sure you are keeping up with the reading. All quizzes will consist of 10 multiple choice questions. Quizzes will be available at least 1 week prior to the due date. You may take the quiz any time prior to 11:29pm on the day it is due. Once you begin the quiz you will have 30 minutes to complete it.

**Tests.** There will be 4 tests, worth 50 points each, which are designed to more deeply assess your understanding of the material. All tests will consist of essay questions in which you will be expected to clearly discuss and explain various concepts. Tests will consist of 4 to 8 questions. Each question can be answered in 2 or 3 paragraphs and should take around 10 – 15 minutes to complete. For each test, you will be allotted 20 minutes per question to write your answer. Because each test will have a different number of questions, the total amount of time you will have to complete each test will vary. For example, if test 1 consists of 5 questions, you will have 100 minutes (1 hour and 40 minutes) to complete the entire test.

All tests are open note but **must be answered in your own words**. All submitted tests will be checked by Turnitin.com to detect any plagiarism (e.g. answers that you cut and paste from the internet). Any test that has a turnitin.com similarity score of 15% or more will not be graded and will earn 0 credit. (A similarity score is the measure of the percentage of your writing that matches another source. I.e. how much was NOT written in your own words.)

Unfortunately, Canvas cannot directly submit timed tests to turnitin.com. This means you will have to do it yourself. So, when you have completed the entire test you will need to copy and paste all of your answers into a new document. Please put only your answers – DO NOT include the question – in this document. You will then submit this document to turnitin.com. A failure to submit your test answers will result in a score of 0 on that test.

You will need to make sure you have created a turnitin.com account prior to taking the first test. Directions on how to do this are posted on the course home page.

**Evolution & natural selection assignment.** This assignment involves completing an online evolution and natural selection tutorial. You will need to purchase the module from SimUText (cost is \$5) and download it onto your computer to run the tutorial. The link and directions necessary to make your purchase can be found by clicking on “SimUText Natural Selection tutorial” under “assignments” in Canvas. This assignment is worth 40 points. You will have completed this assignment when you have completed all the simulations and answered all the questions. There is nothing for you to submit to Canvas. I will retrieve your scores and transfer them to Canvas.

**“Survival of the Sneakiest” cartoon & questions.** This short assignment involves reading a cartoon and then answering a few relevant questions at the end. Please write your answers in a new document and submit ONLY the answers to the assignment in Canvas. This assignment is worth 10 points.

**Videos & worksheets.** You will be required to watch several videos throughout the semester. Each video will illustrate and reinforce concepts and ideas discussed in the readings. Each of the videos will include a worksheet for you to complete using information and **specific examples from the video**. Each video worksheet has slightly different expectations so be sure to carefully read the directions on the worksheet prior to starting the video. Each worksheet is worth 20 points.

**Discussion** Group discussions will take place in the discussion forum on Canvas. This forum is a place where you can ask questions and engage in discussions with your classmates about relevant course material. You will only be expected to participate in at least one (1) group discussion during the semester. Participation can involve either posting a real, thoughtful question about the subject matter or answering another student’s question or engaging in a discussion about a relevant topic. You will enter this forum by selecting the “discussion” tab at the left of the class homepage in Canvas. Once in the discussion forum, you can post a question or topic and/or reply to a question or topic posted by myself or another student. Note: asking or answering what time something is due or where you can find the syllabus does not count as participation and will NOT fulfill this requirement. This participation is worth 20 points.

**Introductory animal observation and description.** This assignment involves you observing animals in their natural habitat and describing what you see. You will spend a minimum of 20 minutes observing an animal (or group of animals) and then writing 2-3 paragraphs describing the animal’s behavior. Your goal is to provide as complete and detailed a description as possible, while avoiding using anthropomorphic (human characteristics) descriptions of what you see. You will also need to give the date, time and location of your observation as well as

the species name of the animal. More detailed instructions are posted under “assignments”. This assignment is worth 30 points.

**Final animal observation paper.** Your final assignment will involve making more observations of animals in their natural habitat, and then analyzing and interpreting your findings. The goal is for you to demonstrate your understanding of the adaptive value of behavior. You will be expected to use and apply correct terminology to describe what you see and explain the observed behaviors from an adaptive point of view.

Detailed instructions are posted under “assignments”. This paper is worth 100 points.

**Final exam.** There will one cumulative exam given at the end of the semester. This exam will consist only of multiple choice questions and is worth 100 points. This exam is NOT open book, note, or internet and MUST be taken at an approved, proctored testing site. Students are responsible for locating a site and communicating the required information to me well before the day of the exam. Please refer to the “Read me first” document for details on how to do this.

**Grade** will be based on the following distribution of points:

Intro about you	10 points	1%
Discussion/interaction	20 points	3%
SimUText tutorial	40 points	5%
Survival of the Sneakiest Cartoon	10 points	1%
10 multiple choice quizzes @ 10 points each	100 points	13%
4 essay tests @ 50 points each	200 points	27%
7 video worksheets @ 20 points each	140 points	19%
Intro animal observation& description	30 points	4%
Final animal observation paper	100 points	13%
Final exam	100 points	13%
<b>Total</b>	<b>750 points</b>	<b>100%</b>

**The following scale will be used for determining the final course grade:**

Depending on the overall performance of this class, these percentages may be lowered, but they will not be raised. Therefore, anyone who earns 90% or above is guaranteed an A grade. Anyone who earns 80% or better is guaranteed at least a B, and so on.

GRADE	TOTAL PERCENTAGE	TOTAL POINTS ACCRUED
A+	100-97%	750-724
A	96-90%	723-671
A-	89%	670-664
B+	88-87%	663-649
B	86-80%	648-596
B-	79%	595-589
C+	78-77%	588-573
C	76-70%	572-521
D	69-60%	520-446
F	59-0%	445-0

It is important that you realize your grade is the result of your performance on the quizzes, tests and other assignments. **You must take responsibility for your own grade!** As your instructor, my job is to provide you with the information you need to know and understand. I will try my hardest to do this through clear and interesting presentations of the material. Your job as a student is to learn it, use it, and understand it. If you are having difficulty doing this, **it is your responsibility to seek help.** Do NOT wait until the last 2 weeks of the semester to do this.

**Extra Credit.** First, I don't generally offer extra credit unless something appropriate comes up. Second, my policy on extra credit is that it is "extra" credit **offered only to students who have already completed all of the regular credit.** This means that if an appropriate extra credit opportunity comes up (and it rarely does – so don't count on any extra credit), only those students who have completed **ALL** the regular credit (i.e. they haven't missed any assignments or have any unexcused absences) will be eligible to complete the extra credit.

**Policy on Cheating.** Santa Barbara City College has a strict policy on academic honesty and I maintain a **zero tolerance for any act of academic dishonesty.** **Academic dishonesty**, as defined by myself and SBCC, **includes**, but is not limited to: **cheating on an exam (e.g. looking at or copying from someone else's exam, talking to someone during an exam, using cell phones or texting, bringing prepared "cheat sheets", using translators or dictionaries) copying someone else's work or answers on worksheets or assignments, plagiarism, or submitting a paper written wholly or in part by someone else.** **All instances of academic dishonesty will be reported to the academic dean** for institutional action. In addition, the dishonest student will receive a zero score for the exam/assignment on which the cheating occurred.

**NOTE:** All assignments (except multiple choice quizzes) **must be answered in your own words.** All submitted assignments will be checked by Turnitin.com to detect any plagiarism (e.g. answers that you cut and paste from the internet or copy from another student). Any assignment that has a turnitin.com similarity score of 15% or more will not be graded and will earn 0 credit and the incident may be reported to the Dean of Students.

**Students with Disabilities.** Disabled Student Programs and Services (DSPS) coordinates all academic accommodations for students with documented disabilities at Santa Barbara City College. If you have, or think you might have, a disability that impacts your educational experience in this class please contact DSPS to determine your eligibility for accommodations. (NOTE: This also includes students who are requesting to bring service

animals into classes. The animals will be registered in DSPS. The procedure also includes requests to bring into classes personal service attendants who are not SBCC employees.) DSPS is located in the Student Services (SS) Building, Room 162. Their phone number is 805-730-4164.

If you are already registered with DSPS please submit your accommodation requests via the 'DSPS Online Services Student Portal' as soon as possible. Once submitted and confirmed please visit with me about your specific accommodations.

Please complete this process in a timely manner to allow adequate time to provide accommodation.

**Student Learning Outcomes (SLOs).** Upon successful completion of this course, students will be able to:

1. Describe and analyze the concept of total fitness. Be able to identify and explain the components of total fitness and demonstrate an understanding of survivorship and reproductive behaviors.
2. Describe social behaviors and demonstrate an understanding of how they evolve, including an understanding of parental investment, mating systems and parental care.
3. Integrate and apply concepts of natural selection, sexual selection and other evolutionary processes through observation, experimentation and description of adaptive behaviors.

Topic	Topic and Assignments	Readings
1	<i>Introduction: How to study animal behavior</i> Topic 1 quiz	N&V*: Ch. 1; Ch. 3.1 – 3.3 Lecture^ 1
2	<i>Evolution, natural selection &amp; adaptation</i> SimUText Natural Selection tutorial Video 1: 4 Billion Year War Topic 2 quiz	N&V: Ch. 2.1 – 2.3 Lecture 2
3	<i>Proximate mechanisms: neurons, hormones, genes and the development of behavior</i> Video 2: Brain Power Topic 3 quiz	N&V: Ch. 3, pp 51; Ch. 4, pp 58-59, 67; Ch. 5; Ch. 6.2; Ch. 10.4; Ch. 13.3 Lecture 3
4	<i>Communication</i> Video 3: Talking to Strangers Topic 4 quiz	N&V: Ch 6.1 – 6.5 Lecture 4
Test 1 – will cover topics 1-4		
5	<i>Survival behavior: self-defense, foraging</i> Video 4: Hunting & Escaping Topic 5 quiz	N&V: Ch. 8; Ch. 7.1, 7.2, 7.3 pp. 152-153 Lecture 5
6	<i>Survival behavior: Habitat selection &amp; navigation</i> Video 5: Finding the Way Topic 6 quiz	N&V: Ch. 9; Ch. 10 pp. 232-237 Lecture 6
Test 2 – will cover topics 5-6		
7	<i>Reproductive behavior: sexual selection</i> Topic 7 quiz	N&V: Ch. 11 Lecture 7
8	<i>Reproductive behavior: mating systems</i> Video 6: Continuing the Line Topic 8 quiz	N&V: Ch. 12 Lecture 8
9	<i>Reproductive behavior: parental care</i> Topic 9 quiz	N&V: Ch. 13.1-13.2, 13.4 Lecture 9
Test 3 – will cover topics 7-9		
10	<i>Social behavior: selfishness, mutualism, altruism, eusocial behavior</i> Video 7: Winning Teams Topic 10 quiz	N&V: Ch. 14.1, 14.3-14.5 Lecture 10
Test 4 – will cover topic 10		

\* N&V = textbook, Nordell & Valone (2014)

^ = lecture notes posted on Canvas