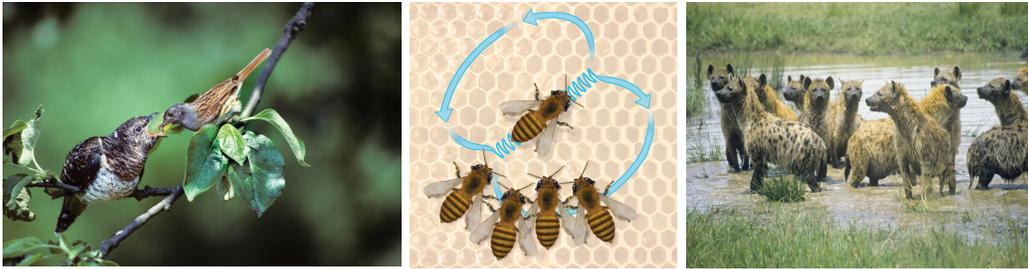# Animal Behavior

ZOO 3600 / ZOO 5690

Spring Semester, 2016 – 3 credits

TR 11:00am-12:15pm
Room: GE (Geology Building) 216

*Professor*: **Sarah Benson-Amram**    Office: BS 400        Email: sbensona@uwyo.edu
Office hours: Tuesday 1-2pm, Thursday 1-2pm, and by appointment
*Teaching Assistant:* **Lauren Stanton**    Office: BS 438    Email: lstanton@uwyo.edu
Office hours: Wednesday 10am-11am and by appointment

*Course Description:*
Why do animals behave the way they do? How do animals talk to each other and what are they saying? Why do some animals live in large groups whereas others live alone? This course will delve into the fascinating world of animal behavior. We will first focus on how animals perceive and respond to the world around them. For example, how do predators locate prey, do animals learn from their experiences, and how do animals navigate along a migration route, or find their way home? To answer these questions we will examine the genetic, hormonal, neurobiological, and developmental bases of behavior. We will then ask why animals do what they do? For example, why is it advantageous for animals to live in groups, why do animals sometimes care for offspring that are not their own, and why do some prey species advertise their presence to predators? To answer these questions, we will focus on the evolutionary bases of behavior. We will discuss a wide range of species and supplement the textbook readings with studies from the primary scientific literature. Students will gain experience observing animals and using the scientific method to answer questions about the behaviors they observe. Students will be encouraged to think critically about the scientific literature and will also learn to communicate scientific results both to their fellow animal behaviorists and to the general public.

My goals for this course are to:
- apply the scientific method to ask and answer questions about animal behavior
- gain a comprehensive knowledge of the major principles of animal behavior
- understand both how and why animals behave in certain ways, particularly by using an evolutionary framework

- gain experience observing animals, and generate hypotheses and predictions to explain the behaviors you observe
- develop your writing skills

*Course Website:* www.uwyo.edu/animalcognition/animalbehavior.html

*Required materials*:

1. Nordell, S.E. and T.J. Valone. 2013. *Animal Behavior: concepts, methods, and applications*. 1$^{st}$ edition. Oxford University Press.
2. iClicker remote

*Optional* - Dugatkin, L. A. 2013. Principles of Animal Behaviour. 3$^{rd}$ edition.

*Syllabus:*
To try and keep this course as environmentally friendly as possible, I am posting most of the course content online. The syllabus, schedule, homework descriptions, and additional readings will be posted on the course website throughout the semester. I will make changes to these documents throughout the semester and because they're online you can view them immediately and always have updated course materials. I will never make due dates earlier than what is posted, but sometimes dates or lecture topics need to be adjusted. It is your responsibility to check the syllabus frequently to make sure you know what is due when, and what you need to read to be prepared for class.

*Lectures:*
The course format includes two 75min lectures per week. Every lecture will contain interactive iClicker questions and in-class exercises necessitating small group discussion (read on for more info on each). The lectures will generally correspond to material in the textbook, although I will supplement them with outside material and there may also be some readings that serve to compliment what we cover in lecture.

I will post complete slides for the lectures after each class. However, I strongly recommend that you supplement these notes with notes of your own. What I post is intended to guide you through the material, not spoon-feed you the information, and I want to be clear that simply reading through the notes that I provide will NOT be sufficient to perform well on the exams.

*In-class exercises:*
During lectures, you'll be given short exercises to help enhance your comprehension of the material. Most of these exercises will center on asking questions, generating hypotheses, coming up with predictions that logically follow your hypotheses, and thinking of ways to test your hypotheses. You will usually be completing them with two or three other students and turning in one assignment per group. These exercises will be based on material that we cover in class and are meant to help you get in the habit of thinking like a scientist—they are not quizzes! In-class exercises cannot be made up unless you have a university-sanctioned conflict that you have discussed with me PRIOR to the lecture you're missing.

*iClicker questions:*
We will also use iClicker remotes during lecture. These questions serve several purposes:
• break up the lecture and help you stay engaged with the material
• foster participation among students reluctant to raise their hands
• help you gauge your own ability to apply concepts
• signal to me the class' overall understanding of a concept
• give you practice on the type of question you'll see on exams

You will receive two-thirds credit just for answering, and full credit for answering correctly. This means you must bring your iClicker remote to lecture if you wish to receive credit for the questions. Like in-class exercises, iClicker questions cannot be made up unless you have a university-sanctioned conflict that you have discussed with me PRIOR to the lecture you're missing. Unfortunately, I can't grant make-up points for malfunctioning remotes, but know that each individual iClicker question is a very small portion of your grade.

*Readings:*
There will be readings associated with each class that you should read BEFORE lecture. See the course schedule and website for those assignments. Additional readings will be provided from the scientific literature. Those readings will be posted online. You should frequently check the course website and syllabus for updates as the schedule is likely to change throughout the semester.

*Difficulty*:
This class is hard and time consuming. I am interested in your learning a lot about the fascinating field of animal behavior. Doing that requires hard work and long hours.

*Differently Abled Students:*
If you have a physical, learning, sensory, or psychological disability and require accommodations, the University policy is that you must first talk to University Disability Support Services (room 330 Knight Hall). They will then contact me regarding how to accommodate your needs, which I am very happy to do.

*Grading:*
This course will be graded out of 400 possible points. Your grade will consist of points earned from the following items:

**First Exam: 20%**
The first exam will consist of a test on all of the knowledge covered in lecture, assigned readings, guest lectures, videos, and class discussions up to the date of the test. The first exam will take place during the normal class period on Thursday February 25th.

**Second Exam: 20%**
The second exam consists of a test on all of the knowledge covered in lecture, assigned readings, guest lectures, videos, and class discussions up to the date of the test. However,

there will be a stronger emphasis on material covered in the second portion of the course, after the first exam. The second exam will take place during the normal class period on Tuesday April 5th.

**Final: 20%**
The final will be cumulative and will test on all of the knowledge covered in lecture, assigned readings, guest lectures, videos, and class discussions up to the date of the test. However, there will be a stronger emphasis on material covered in the third portion of the course, after the second exam. The final will be held **Thursday May 12th from 10:15 am - 12:15 pm**.

**Note:** You are responsible for attending class on exam days. You must contact me PRIOR to the exam if you absolutely cannot take a test at the scheduled time. Absences for exams must be approved by the dean of students (i.e. a "University Excused Absence"). Make-up exams will be difficult and the format will not be the same as the standard exam.

**Assignments: 30%**
The best way to learn is by doing. I will assign three homework assignments. You will be given at least a week to complete each assignment. Dates for homeworks are listed in the schedule (which will be posted and updated on the website) and are tentative and will likely be changed.

**iClicker questions and In-class exercises: 10%**
As discussed above, you are expected to stay engaged during lecture by answering iClicker questions and by participating in in-class exercises.

| Percentage | Points | Grade |
|---|---|---|
| 90-100 % | ($\geq$ 360 points) | A |
| 80-89.8 % | (320-359 points) | B |
| 70-79.8 % | (280-319 points) | C |
| 60-69.8 % | (240-279 points) | D |
| < 60 % | ($\leq$ 239 points) | F |

*Graduate students*:
I would like to meet with graduate students (registered for ZOO 5690) within the first week of class to discuss the requirements for your 'graduate level credit'.

*Late policy:*
All assignments are due at the beginning of class. Anything turned in after the first 10 minutes of class will receive a late penalty.
- 0 days late (between 10:45am and midnight): 10% penalty
- additional 10% for each day late after that (i.e. 20% for 1 day late, 30% for 2, etc…)
Assignments more than 5 days late will not be accepted!!!

*Academic Integrity:*

You are obliged to follow the University's policy on academic integrity (see http://www.uwyo.edu/generalcounsel/_files/docs/unireg802.pdf). When in doubt, please ask first! The University of Wyoming is built upon a strong foundation of integrity, respect and trust. All members of the university community have a responsibility to be honest and the right to expect honesty from others. I have no tolerance when it comes to academic dishonesty. Students involved in academic dishonesty of any type, including plagiarism, cheating during exams, or misrepresenting the nature of your involvement in any assigned work may receive an automatic F in the course**.**

*Grading:*
Grading errors may occur on tests. I therefore encourage you to bring suspected errors to my attention.  If you feel I did not give you proper credit for a question you may request that I re-grade the test.  If you have checked the answer key, and I mismarked a multiple-choice question, you may bring the problem to my attention without a written response.  However, if you wish to address a more involved problem with grading, turn in your test with a **WRITTEN** explanation indicating why you feel the answer you provided was correct.  I will consider your written explanation for that question but retain the right to re-grade the entire test.  You must submit any request for re-grading within 2 weeks of the date the test is returned to the class. **Note:** I photocopy some or all of the tests.  Any exams that show evidence of tampering will be treated severely as cheating -- please don't even consider it.

*Feedback:*
Your suggestions and criticisms (preferably constructive) are welcome at any point. There will be a formal occasion for teaching evaluation at the end of the course, but I am always interested in your reactions to particular topics, assignments, etc. I rely on student feedback to improve the course this semester and in the future. So if you have an idea or suggestion, please don't wait until the end of the semester to tell me—the sooner you share it, the sooner I can act on it.