

## **Biology 886- Sexual Selection Spring 2020**

**Instructor:** Dr. Nicholas Hobbs

**Office:** 201F Bruner Hall

**Office Hours:** 11:00am – 12:00pm Monday, 9:00am – 10:00am Wednesday, and 10:00am – 11:00am Thursday, or by appointment

**Office Phone:** 308-865-1572

**Email:** [hobbsjn@unk.edu](mailto:hobbsjn@unk.edu)

NOTE: Email is my preferred method of contact, if you inquire about a personal issue. Please give me 24 hours to respond to all emails. General questions about the course can be posted on the Frequently Asked Questions Discussion Board in Canvas.

**COURSE DESCRIPTION:** Group discussion of the mechanisms of sexual selection and its role in evolution using classic and recent scientific literature.

**REQUIRED READINGS:** Reading material will be assigned every week, consisting of 1-2 PDFs of scientific articles. These materials will be made available on Canvas (<https://canvas.unk.edu>). As these materials are the basis for the online discussions, it is expected that you complete the readings in a timely manner. Some links on Canvas will link directly to a PDF of the article. **To access other articles, after clicking on the link on Canvas, select “Locate full text of this item” (or something similar) on the left side of the page.**

**REQUIRED MATERIALS/SOFTWARE:** As this is an online class, you will need a computer/laptop with access to the internet, a microphone, and the following programs: Microsoft PowerPoint, Microsoft Word, Adobe Acrobat or another program to read PDFs, and VidGrid (a screen capture program available through Canvas).

### **COURSE OBJECTIVES:**

- 1) Identify the similarities and differences between sexual selection with natural selection.
- 2) Differentiate between intrasexual and intersexual competition, and provide examples of each.
- 3) Describe the conflict between the sexes and how it relates to different mating and parenting strategies.
- 4) Apply critical thinking skills to construct an argument using data to support the claim.

**COURSE ORGANIZATION:** This course consists of an introduction, 18 discussion board topics over 13 weeks, and a wrap-up week. At the beginning of each week, I will upload the reading materials to Canvas and post the discussion board(s).

**DISCUSSION BOARDS:** Throughout the semester, students will be presented with weekly discussion topics based on readings of research and review articles related to

the topics listed on the course outline below. Some weeks will have two discussion boards while other weeks will only have a single discussion board. Students are expected to contribute to **both** discussion boards during such weeks. Students will submit their posts onto the appropriate discussion board on Canvas. Discussion boards will be unlocked on Mondays at 12:01 AM Central Time and locked on Sundays at 11:59 PM Central Time.

Please see the separate rubric (posted on Canvas) for a complete breakdown of how I will be grading the discussion boards. Briefly, each discussion board is worth 10 points. Students will be scored on three criteria: 1) evidence of critical thinking (maximum of 4 pts), 2) minimum posting requirements (maximum of 3 points), and 3) responses to classmates and Dr. Hobbs (maximum of 3 points). Doing the minimum will only provide you with the opportunity to be scored and possibly earn 1 of the possible 10 points.

I do not expect you to spend 5 hours per week in each of these Discussion Boards. I expect, given the criteria listed in the rubric, for you to post **most days Monday-Friday**. I will not be keeping track of time spent on the Discussion Board, as it takes time to read and respond to the posts. You should be **wanting** to post every day. You do not need a peer-reviewed reference for every post, but if you are stating an opinion, you should provide support for it with data/evidence from a peer-reviewed source (not Wikipedia!).

Remember, Discussion Boards are for just that, **DISCUSSION!** Unless you are the first person answering the question(s) posted, you should **not** be starting a new thread. You should be replying to someone else. I am not concerned that everyone answers the posted question. The question or questions serve as a prompt for us to begin discussion. I want discussion, not simply posting for points.

What should this look like? (Example taken from Dr. Carlson's Bioethics of HeLa Cells)

*Question: Do birds have fur?*

**Dr. Hobbs:** Birds do not have fur, they have feathers. These feathers are used in mating dances and rituals. Many times, it is the male of the species that has the more ornamental feathers. This helps in attracting a mate (Leghorn 2016)

Reference: Leghorn F. 2016. Use of ornamental feathers in mating. *Ornithology*, 40:55-65. Doi:987.890/99

**Reply from student 1:** Dr. Hobbs, I disagree with you. Some birds do have fur. If we look at the ancient FleeceFlyer, it had a thick covering of purple fur, not feathers. It was a flying bird also. (Jurassic 2015)

Reference: Jurassic P. 2015. FleeceFlyer: The Original One-Eyed One-Horned Flying Purple People Eater. *Wilson's Transactions*, 56: 98-100.

**Reply to student 1 from student 2:** Do you have a picture of this? I would like to know how they determined this could fly? Was it large? This is amazing!

Yes, I will be in Discussion Board M-F, this is the reason I set it up. I love to discuss with you! I will play “devil’s advocate”. I will ask questions, etc. I am also **the only** person who gets credit for saying “Awesome! I agree!” or any phrases like this.

If you have any questions on the score you earned for the week, please simply email me. Also, please email any questions!

As this is an online format, tone and expression may not be readily discerned from your posts. Please avoid the use of online or text message abbreviations or symbols. Your posts should show respect for the views and experiences of your other classmates. I will remove any offensive posts from the board and these posts will not be considered for grading purposes.

**TERM PAPER:** Students will be assigned one term paper, 5-7 pages in length (excluding references, tables and figures, etc.) The due date for this paper is listed in the Course Outline section below. More detailed instructions on how to format and submit the paper can be found on Canvas. Late papers will be penalized **20% per day late**.

**GRADING SCALE:** Grades will be calculated based on the following assignments: 1) completion of a Syllabus Quiz (10 pts), 2) submitting an introduction post and responding to classmates’ posts using VidGrid (10 pts), 3) participation in weekly discussion boards (180 pts), and 4) a term paper due at the end of the semester (50 pts; see term paper section for details). The final course grade (out of 250 possible points) is assigned as a letter grade using the following scale:

A+ 99-100%	B+ 87-89%	C+ 77-79%	D+ 67-69%	F < 60%
A 93-98%	B 83-86%	C 73-76%	D 63-66%	
A- 90-92%	B- 80-82%	C- 70-72%	D- 60-62%	

**COURSE OUTLINE:**

Week	Beginning	Topic	Reading Assignment
1	Jan 13	Introduction	
2	Jan 20	Sexual Selection & Sexual Conflict	Kokko et al., 2006; Hosken & House, 2011
3	Jan 27	Sexual Selection in Males and Females	Clutton-Brock, 2007; Rosvall, 2011
4	Feb 3	Mating Systems	Emlen & Oring, 1977; Aloise King et al., 2013
5	Feb 10	Mate Choice	Jones & Ratterman, 2009; Fitzpatrick & Servedio, 2017
6	Feb 17	Postcopulatory Sexual Selection	delBarco-Trillo & Ferkin, 2004; Eberhard, 2009

7	Feb 24	Honest/Costly Signals, part 1	Zahavi, 1975; Számadó & Penn, 2015
8	Mar 2	Honest/Costly Signals, part 2	Kodric-Brown & Brown, 1984; Doutrelant et al., 2012
9	Mar 9	Runaway Sexual Selection	Brooks, 2000; Chandler et al., 2012
10	Mar 16	Parental Investment	Trivers, 1972
11	Mar 23	SPRING BREAK	
12	Mar 30	Sex Role Reversal	Forsgren et al., 2004; Geberzahn et al., 2009
13	Apr 6	Polyandry	Zeh & Zeh, 2003
14	Apr 13	Female Promiscuity	Fitzpatrick et al., 2009; Panova et al., 2010
15	Apr 20	Sexual Selection/Sexual Conflict in Humans	Mulder & Rauch, 2009; Puts, 2010
16	Apr 27	Course Wrap-up	Term paper due Fri., May 1 by 11:59 PM CST

**ACADEMIC INTEGRITY:** UNK's policy is the maintenance of academic honesty and integrity is a vital concern of the University community. This policy is stated in the Graduate Catalog or at <http://catalog.unk.edu/graduate/academics/academic-regulations/expectations-in-the-classroom/academic-integrity-policy/>. Any student found in violation of this policy will be subjected to both academic and disciplinary sanctions. Violation of this policy includes Plagiarism, Cheating, Fabrication and Falsification, and Other Acts of Academic Dishonesty.

You are encouraged to make use of the online tools and resources provided at [www.plagiarism.org/](http://www.plagiarism.org/) to help you identify the various types of plagiarism, learn how to effectively paraphrase, as well as adequately cite your sources.

**POLICY ON INCOMPLETES:** Under very unusual circumstances an "Incomplete" may be assigned. To be considered for an "Incomplete" in Biology 886:

1. You must submit the reasons you cannot complete the scheduled work. This must include a copy of your class schedule and description of your responsibilities outside the classroom. This should be done in writing and include confirmation from your employer when appropriate.
2. You must specify the assignments you have missed and a schedule of plans to complete them

### Students with Disabilities

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with UNK Disabilities Services for Students Office, 172 Memorial Student Affairs Building, 308-865-8988 or by email [unkdso@unk.edu](mailto:unkdso@unk.edu)

### **Students Who are Pregnant**

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact Cindy Ference in Student Health, 308-865-8219. The following link provides information for students and faculty regarding pregnancy rights. <http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>

### **Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault**

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

**Local Domestic Violence, Sexual Assault Advocacy Agency** 308-237-2599

**Campus Police (or Security)** 308-865-8911

**Title IX Coordinator** 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

### **Problems/Questions**

If you have questions then ask or come and see me or contact me via e-mail or phone. If you are having problems with the course come and see me before it is too late (not the week before your term paper is due or when the course is over).