

Biology 830P- Special Topics in Biology: History of Hormones
Spring 2023
Section 01- Online

Instructor: Dr. Nicholas Hobbs

Office: 220 Bruner Hall

Office Hours: 10:00am – 11:00am Mondays and Wednesdays, 11:00am – 12:00pm Tuesdays, or by appointment

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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 MATERIALS

- Required: Aroused: The History of Hormones and How They Control Just About Everything. Randi Hunter Epstein (ISBN 978-0-393-35708-0)
- Respondus Lockdown Browser REQUIRED/MANDATORY for all quizzes! Please use the following link to download the Respondus Lockdown Browser:
<https://download.respondus.com/lockdown/download.php?id=477439341%20>.
More information is on Canvas. This will NOT work on a Chromebook or Linux computer.
- E-mail: All students MUST use their UNK email account so that I can reach them. All emails to Dr. Hobbs should be sent from your email account and **not** through Canvas.
- Computer/laptop with Adobe Acrobat and Microsoft Word

COURSE DESCRIPTION

Topics are studied which are not assigned or covered in other courses in the department. The format of this course will vary depending on the topic of instruction and the needs of students. Topics in Botany Topics in Fresh Water Biology Topics in Vertebrate Biology Topics in Invertebrate Biology Topics in Nebraska Flora Topics in Physiology

Total Credits Allowed: 18.00

COURSE INFORMATION

Discussion-based course on the history of endocrinology and how the study of hormones has changed since their discovery over 100 years ago.

COURSE OBJECTIVES:

1. Students will be able describe how the study of hormones has changed over the last 100+ years.
2. Students will describe the source, target, and action of the major human hormones.
3. Students will be able to describe the different techniques and tools used to study endocrinology.
4. Students will be able to evaluate scientific research papers.

GRADING SCHEME:	Points	Due Date
Introduction Post	10	Sunday, January 29 th by 11:59 pm CT
Syllabus Quiz	10	Sunday, January 29 th by 11:59 pm CT
Group Discussions (28 @ 10 pts each)	280	Weekly except for first and last week of class
Quizzes (14 @ 10 pts each)	140	Weekly except for first and last week of class
Final Paper	60	Monday, May 15 th by 11:59 pm
Total Points	500	

GRADE ASSIGNMENT: Grades will be assigned using the standard grading scale for the Department of Biology, as follows: A (93-100%), A- (90-92%), B+ (88-89%), B (83-87%), B- (80-82%), C+ (78-79%), C (73-77%), C- (70-72%), D+ (68-69%), D (63-67%), D- (60-62%), and F (below 60%). FYI, I do not round up grades. Therefore,

if you have an 82.6%, you have earned a letter grade of a B-, not a B. Also, 1% = 5 points not 1 point. Grade assignments are final unless there is a calculation error.

SUPPLEMENTAL READINGS

Each week, in addition to the readings from “*Aroused*,” you will be assigned two primary research articles/review articles related to the topics being discussed in the assigned chapter from “*Aroused*.” These articles will be available on Canvas the week prior to their discussion. For example, supplemental readings for Week 4 will be available at the beginning of Week 3 (Feb 6).

LECTURE QUIZZES

Each week you will be given a quiz over both the “*Aroused*” readings **AND** the supplemental readings worth 10 points. Quizzes will make up 140 points of your grade. The purpose of these quizzes is to make sure that you are keeping up with the readings for each discussion.

GROUP DISCUSSIONS: Each week, students will be presented with two weekly discussion boards: the first discussion board will be based on the reading from “*Aroused*” and the second discussion board will be based on the associated supplemental readings. Students will submit their posts onto the appropriate discussion board on Canvas. Discussion boards will be unlocked on Mondays at 12:01 am CT and locked on Sundays at 11:59 pm CT.

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. These discussions will be worth 10 points each, for a total of 280 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.

FINAL PAPER: During the first week of class, students will submit a list of three hormones chosen from a list provided by Dr. Hobbs. If multiple students select the same hormone, Dr. Hobbs will randomly assign one student the hormone and give the other student(s) their alternative hormone. This hormone will be the topic of their final paper. In this paper, students will 1) discuss how the hormone was discovered, 2) discuss the source, target, and action of the hormone, and 3) design a brief experiment examining the effects of the hormone. You must support points 2 and 3 above using peer-reviewed primary research articles (review articles are acceptable, but most of your articles should be primary research articles). Be creative with your experiment! Make sure to discuss the organisms or cells you use and justify why they are important for your experiment. Also be sure to include basic methodology and expected results for your experiment. This paper is due by Monday, May 15th at 11:59pm CT.

COURSE OUTLINE:

Week	Beginning	Aroused Reading	Supplemental Readings	Assessment
1	Jan 23	Introduction Chapter 1: The Fat Bride		Introduction Post Syllabus Quiz
2	Jan 30	Chapter 2: Hormones...As We May Call Them	Matos et al., 1997 Chu et al., 2009	Readings Quiz 1 Group Discussions 1 and 2
3	Feb 6	Chapter 3: Pickled Brains	Hernandez-Ramirez et al., 2017 Tsay et al., 2017	Readings Quiz 2 Group Discussions 3 and 4
4	Feb 13	Chapter 4: Killer Hormones	Acar & Ulgen, 2020 Armstrong et al. 2022	Readings Quiz 3 Group Discussions 5 and 6
5	Feb 20	Chapter 5: The Virile Vasectomy	Reinberg et al., 1988 Gobetti & Zerani, 1999	Readings Quiz 4 Group Discussions 7 and 8
6	Feb 27	Chapter 6: Soul Mates in Sex Hormones	Edwards et al., 1980 Muasher et al., 1984	Readings Quiz 5 Group Discussions 9 and 10
7	Mar 6	Chapter 7: Making Gender	Rajpert-de Meyt et al., 1999 Bakker, 2022	Readings Quiz 6 Group Discussions 11 and 12
8	March 13	SPRING BREAK		
9	Mar 20	Chapter 8: Growing Up	Li et al., 2022 Sia et al., 2022	Readings Quiz 7 Group Discussions 13 and 14
10	Mar 27	Chapter 9: Measuring the Immeasurable	Yalow & Berson, 1960 Turkmen et al., 2022	Readings Quiz 8 Group Discussions 15 and 16
11	Apr 3	Chapter 10: Growing Pains	Sonntag et al., 2012 Lopez-Siguero et al., 2022	Readings Quiz 9 Group Discussions 17 and 18
12	Apr 10	Chapter 11: Hotheads: The Mysteries of Menopause	Skorupskaite et al., 2018 Mehta et al., 2021	Readings Quiz 10 Group Discussions 19 and 20
13	April 17	Chapter 12: Testosterone Endopreneurs	Cherrier et al., 2015 Corona et al., 2020	Readings Quiz 11 Group Discussions 21 and 22

14	Apr 24	Chapter 13: Oxytocin: That Lovin' Feeling	Insel & Shapiro, 1992 Burkett et al., 2016	Readings Quiz 12 Group Discussions 23 and 24
15	May 1	Chapter 14: Transitioning	Safer & Tangpricha, 2019 Aghi et al., 2022	Readings Quiz 13 Group Discussions 25 and 26
16	May 8	Chapter 15: Insatiable: The Hypothalamus and Obesity	Blundell et al., 2001 Monteleone et al., 2018	Readings Quiz 14 Group Discussions 27 and 28
17	May 15			Final Paper (Monday, May 15th, 11:59pm CT)

ATTENDANCE POLICY

Your instructor may have indicated on their syllabus an attendance policy specific to their class. If so, that is the policy with which you must comply. If no other policy is stated, the University-wide attendance policy will apply.

[Graduate Student Attendance Policy](#)

ACADEMIC HONESTY POLICY

Academic honesty is essential to the existence and integrity of an institution of higher education. The responsibility for maintaining that integrity is shared by all members of the academic community. To further serve this end, the University of Nebraska at Kearney has a policy relating to academic integrity.

[Graduate 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/ 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 830P:

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

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 they 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.

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 the UNK Disabilities Services for Students (DSS) office, 175 Memorial Student Affairs Building, 308-865-8214 or by email 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 the Student Health office at 308.865.8218. The following links provide information for students and faculty regarding pregnancy rights. <https://thepregnantscholar.org/title-ix-basics/>
<https://nwlc.org/resource/faq-pregnant-and-parenting-college-graduate-students-rights/>

UNK STATEMENT OF DIVERSITY & INCLUSION

UNK stands in solidarity and unity with our students of color, our Latinx and international students, our LGBTQIA+ students and students from other marginalized groups in opposition to racism and prejudice in any form, wherever it may exist. It is the job of institutions of higher education, indeed their duty, to provide a haven for the safe and meaningful exchange of ideas and to support peaceful disagreement and discussion. In our classes, we strive to maintain a positive learning environment based upon open communication and mutual respect. UNK does not discriminate on the basis of race, color, national origin, age, religion, sex, gender, sexual orientation, disability or political affiliation. Respect for the diversity of our backgrounds and varied life experiences is essential to learning from our similarities as well as our differences. The following link provides resources and other information regarding D&I: <https://www.unk.edu/about/equity-access-diversity.php>

PROBLEMS/QUESTIONS

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