# ANS 6932- Mammalian Endocrinology

Meeting time: TBD

INSTRUCTORS:

Dr. Corwin Nelson

<u>cdnelson@ufl.edu</u>

352-294-6993

Dr. John Bromfield

<u>jbromfield@ufl.edu</u>

352-294-6991

Office Hours: By appointment

CATALOG DESCRIPTION: CREDIT: 1; PREREQ: BCH 3025 or BCH 4024

Physiologic systems of farm animals. Emphasizes the impact of endocrinology and cell biology on animal physiology, development and performance.

#### **COURSE FORMAT:**

The course will be divided into modules on selected topics of endocrinology. Each module will include lectures and recommended readings. All lectures will be recorded and available in Canvas. We will meet once per week to discuss lectures and readings.

#### **COURSE OBJECTIVES:**

Upon completion of the course students will be able to:

- 1. Identify and discuss major physiological, biochemical, cellular and molecular processes of endocrine systems of animals with a special emphasis on farm animals.
- 2. Interpret and discuss scientific journal articles in the field of endocrinology.
- 3. Analyze and critique scientific data related to study of endocrine systems.
- 4. Develop new hypotheses regarding endocrine mechanisms and functions.
- 5. Assemble concepts and knowledge from multiple systems to construct an overview of endocrine control of whole-animal physiological processes (i.e., growth, onset of lactation, reproduction).

# **REQUIRED TEXT**: none

# **Recommended readings:**

Vertebrate Endocrinology, 5th Edition, Norris and Carr, ISBN# 0123948150

Endocrinology. 6th edition, ME Hadley; ISBN#0131876066.

# **COURSE TOPICS AND KEY DATES**

Module	Dates	Topic
1		Overview of endocrine systems
2		Neuroendocrine system
3		Hormone synthesis and metabolism
4		Receptors and Signal Transduction Pathways
	2/16/2022	Exam 1
5		Thyroid axis
6		Somatotropic axis
7		Adrenal axis
8		Gonadotropic axis
	3/16/2022	Exam 2
9		Endocrine control of glucose
10		Endocrine control of Ca/P and bone
11		Endocrine control of lactation
12		Endocrine control of energy
13		Endocrine control of growth
	4/20/2022	Exam 3

# **GRADES AND GRADE POINTS**

For information on current UF policies for assigning grade points, see <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>

# **Grading scale**:

$\mathbf{A}$	(93-100%)
<b>A-</b>	(90-92.99%);
$\mathbf{B}$ +	(87-89.99%);
В	(83-86.99%)
<b>B</b> -	(80-82.99%)
$\mathbf{C}$ +	(77-79.99%)
$\mathbf{C}$	(73-76.99%)
C-	(70-72.99%);

**D**+ (67-69.99%) **D** (63-66.99%) **D**- (60-62.99%) **E** (<60)

**Exams (75%)** Three exams will be given that assess learning of lectures, discussion and readings. Exams will be comprised of 8-10 short answer/essay questions.

Quizzes (25%) Each module will include a quiz to assess comprehension of the lecture material.

#### **GRADES AND GRADE POINTS**

For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

# **Course Expectations:**

The class will meet once for each module to discuss lecture and assigned readings. Success in the course is paramount to students to carefully watch the recorded lectures and take notes as they would in a face to face lecture. Students should also complete the recommended readings, paying close attention to the hypothesis, objectives, approach, key findings and implications of the scientific literature that is assigned. The quality and utility of discussions depend greatly on the students coming prepared to discuss and ask questions.

#### ATTENDANCE AND MAKE-UP WORK:

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</a>.

#### **IN-CLASS RECORDING:**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium,

to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

# **ONLINE COURSE EVALUATION PROCESS:**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

# **ACADEMIC HONESTY:**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

# **SOFTWARE USE:**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

# SERVICES FOR STUDENTS WITH DISABILITIES:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students

Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

#### **CAMPUS HELPING RESOURCES:**

# **Health and Wellness**

<u>U Matter, We Care:</u> If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

<u>Counseling and Wellness Center:</u> Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

<u>Student Health Care Center:</u> Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

<u>UF Health Shands Emergency Room / Trauma Center:</u> For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road,

Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website. <u>GatorWell Health Promotion Services</u>: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

#### **Academic Resources**

<u>E-learning technical support:</u> Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

<u>Career Connections Center:</u> Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

<u>Library Support:</u> Various ways to receive assistance with respect to using the libraries or finding resources.

<u>Teaching Center:</u> Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

<u>Writing Studio:</u> 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

<u>Student Complaints On-Campus:</u> Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process.