Lecture, Day, Topic Reading

1 1/11 How one learns. Homeostasis, Krogh principle Introduction to course and physiology.

- 2 1/16 Molecules, Energy and Biosynthesis
- 3 1/18 Membranes, Channels and Transport/ Physical basis of neuronal function
- 4 1/23 Physical basis of neuronal function
- 5 1/25 Physical basis of neuronal function
- 6 1/30 Communication along and between neurons
- 7 2/1 Communication along and between neurons
- 8 2/6 Communication along and between neurons
- 9 2/8 Sensory Mechanisms. Maybe a lecture quiz.
- 10 2/13 Sensory Mechanisms

EXAM DATES THIS EXAM WILL TAKE PLACE IN THE LAB. You have 2 hours. (SECTIONS 1-3 in your scheduled lab time on FEB 12) (SECTION 4 in your scheduled lab time on FEB 14)

11 2/15 Sensory Mechanisms/ Organization of Nervous System

The lab is will meet this week for sections 1-4 (sec 1-3 on Monday 2/19 and sec 4 on 2/21) Going over exam scores and grading and maybe a lab demo.

- 12 2/20 Muscle
- 13 2/22 Muscle & Behavior
- 14 2/27 Muscle & Behavior
- 15 3/1 Catch up lectures. Maybe in class quiz.
- 16 3/6 Behavior
- 17 3/8 Endocrine ... Hypothalamus-Pituitary

3/12-3/15 No class, Spring break

- 18 3/20 Thyroid, parathyroid, adrenal and pancreas
- 19 3/22 Cardiovascular
- 20 3/27 Cardiovascular
- 21 3/29 Cardiovascular / Respiration

April 2 and April 4. LAB SECTIONS 1-4 WILL MEET THIS WEEK IN THE LAB FOR LAB DEMOS & EXAM REVIEW.

- 22 4/3 Respiration
- 23 4/5 EXAM DAY IN LECTURE CLASS
- 24 4/10 Respiration / Ionic and Osmotic Balance
- 25 4/12 Ionic and Osmotic Balance
- 26 4/17 Ionic and Osmotic Balance/ Digestion
- 27 4/19 Digestion / Heat and adaptations / Catch up & Exam review

5/1......8:00 AMFINAL EXAM

http://www.uky.edu/registrar/content/spring-final-exam-schedule

Grades

47% Lab/GCCR Writing. See lab section material for grade breakdown.

53% Lecture content: Quizzes, in class assignments, exams including the final. There might be bonus questions on exams or from class assignments. Made available to all students equally.

LECTURE

Exam 1 - 100 points Exam 2 - 100 points Final Exam 3 - 150 points Other 60 (class participation, quizzes and short assignments in class) Lecture Total: 410 points

Grading:

Exam 1	100 points
Exam 2	100 points
Final Exam	150 points
Lecture assignments	-
and in class activities	60 points
Lab Question Sets	80 points
GWCCR Assignments	140 points
Online Quizzes (6 x 5 points)	16 points
	646 points total

Final grades will be based on total points earned and will be assigned as follows:

- A = 581 646 points
- B = 516 580 points
- C = 452 515 points
- D = 387 451 points
- E = less than 387 points

Important Course NOTES:

- There will be <u>no extra credit</u>.
- There is <u>no curving</u> of any grades in this course for any reason. Thus, all students have the <u>full</u> opportunity to earn the grade of A.
- February 2, 2018: Last day to drop courses without appearing on transcript.
- Midterm grades will be posted by midnight March 7, 2018.
- The last day to withdraw from the course is March 31, 2018.

Class attendance will be used as a basis for grading when in class projects are being worked on (which is often), quizzes, and short assignments. This is part of the 50 points listed above. Extra credit projects maybe be given randomly on particular days in class.

The course objectives:

- (1) Understanding of the fundamental principles of animal physiology;
- (2) Adaptations which occur in various animal groups which have developed through natural selection
- (3) Students will learn how to research and discuss concepts in animal physiology;
- (4) Conduct laboratory experimentation on living organisms by experimental design, collect data, analyzing, writing the results and interpretation of data in conjunction with scientific literature

Course Learning Outcomes: (same as those for a course in Australia https://www.adelaide.edu.au/course-outlines/105180/1/sem-1/)

- (1) Describe the anatomy & physiology of the major systems of the body within the framework of the underlying principle of homeostasis
- (2) Describe and identify the variations in form and function between certain animal species
- (3) Demonstrate skills in animal handling and experimentation
- (4) Demonstrate skills in literature analysis, scientific report writing and group study

Excused Absences:

Students need to notify the professor of absences prior to class when possible. *Senate Rules 5.2.4.2* defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no

later than the last day in the semester to add a class. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud (859-257-3737,

http://www.uky.edu/Ombud/ForStudents ExcusedAbsences.php.

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused) per University policy.

Per *Senate Rule 5.2.4.2*, students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The professor must give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

Verification of Absences:

Students may be asked to verify their absences in order for them to be considered excused. *Senate Rule 5.2.4.2* states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness, or death in the family. Appropriate notification of absences due to University-related trips is required prior to the absence when feasible and in no case more than one week after the absence.

Academic Integrity:

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: http://www.uky.edu/Ombud. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Senate Rules 6.3.1 (see <u>http://www.uky.edu/Faculty/Senate/</u> for the current set of *Senate Rules*) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person

may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Accommodations Due to Disability:

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. Their web address is http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/.

A general lab schedule is below. See canvas for more details for your section.

The laboratory component of the course is a **major** portion of the fundamental learning of all concepts in Animal Physiology. The lab component of BIO 350 provides upper level GCCR writing credit as part of the UK Core. The course has been designed to assure that the lab and classroom material are closely aligned and to help you meet the course learning objectives. Each laboratory lasts a maximum of 3 hours. The lab sessions are not a separate part of the course; rather they are an essential component for the learning and application of classroom concepts. The objective of lab sessions is for you to ask questions about any material that you do not understand. Written laboratory reports of varying length will be assigned for each lab and you must submit your completed work through appropriate links on Canvas by the deadline for each assignment. Your teaching assistants are at these lab sessions for instruction and to assist in your learning; however, if you do not prepare yourself by reading and trying to understand the course material *prior to coming* to lab they will not be able to help. Teaching assistants need feedback at these sessions; they are not there to lecture and add new material. They are there to help you understand the material and apply the physiological concepts to real-world problems; therefore you must know before you arrive what you do not understand. Attendance will be taken at each lab session. If you do not attend your assigned laboratory session, you will not be able to complete the associated question sets. Submission of work by absentee students is not accepted, and if attempted, the student will earn an automatic zero on this assignment. Dr. Melody Danley is the laboratory coordinator for BIO 350.

The fraction of the overall grade for the course completed during the laboratory sessions and assignments is significant. These labs will not only assist you in understanding the course content but will also greatly aid in your performance on the course summative assessments (i.e. exams).

Therefore, students will be required to think critically, express themselves orally and in written form, and provide provocative and intellectual discussion to the data and topics that are presented in both the classroom and laboratory learning environments. Each of you may or may not choose to become professional physiologists in the future. Thus, the goal in this course is for you to retain knowledge of the basic fundamental concepts of animal physiology which you can apply in any future endeavor in the biological sciences.