#### **BZ 110 PRINCIPLES OF ANIMAL BIOLOGY**

Spring 2020 SECTION 001 Yates 104 TR 3:30-4:45 pm

#### INSTRUCTOR

Dr. Karen Raines OFFICE: Biology 208

EMAIL: Karen.raines@colostate.edu

PHONE: 491-3093

OFFICE HOURS: T 1-1:30 pm; W 1-2 pm; R 12-12:30 pm; or by appointment.

## ACADEMIC INTEGRITY AND CLASSROOM BEHAVIOR

Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, you will be asked to sign the following statement on your exams:

## "I have not given, received, or used any unauthorized assistance."

CSU policies on academic integrity and classroom behavior can be found in the CSU General Catalog. <a href="http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/#academic-integrity">http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/#academic-integrity</a>

#### COURSE DESCRIPTION

Principles of Animal Biology is organized into 3 parts: common life processes, survey of major animal phyla, and animal form and function. Part 1, common life processes, will introduce cell and tissue structure and function, cell division, Mendelian genetics, the genetic basis of evolution and the evolutionary and ecological principles that unify all life. Part 2, survey of animals, will emphasize evolutionary and ecological relationships, aspects of animal organization that unite major animal phyla, and animal adaptations. Part 3, animal form and function, will detail select organ systems in invertebrates and vertebrates.

#### COURSE OBJECTIVES

Upon successful completion of this course, students will be able to:

- distinguish prokaryotic and eukaryotic cells
- recognize and describe structures of a eukaryotic cell
- model genetic mechanisms and cell division
- interpret evolutionary mechanisms that lead to speciation
- illustrate ecological processes at work in animal populations
- consider threats to global biodiversity
- classify animals using taxonomic criteria
- differentiate types of tissues found in animals
- analyze animal form and function
- survey major animal phyla
- APPRECIATE BIODIVERSITY!

#### TEXTBOOK AND McGRAW-HILL CONNECT

The textbook for the course is Zoology, 11<sup>th</sup> ed, by Miller and Tupper. To reduce your course material cost, the CSU Bookstore participates in the **Inclusive Access Program** using Connect for Zoology which will include online homework and access to the full text. Note: All enrolled students are automatically included in this program, the cost is \$66.

# Connect for Zoology Access Instructions:

- You will use McGraw's courtesy access until the Add/Drop date.
- Use the following URL to obtain your free trial access:
- https://connect.mheducation.com/class/k-raines-bz-110-section-001-spring-2020
- If you (the student) choose to opt out of the program provided by the CSU Bookstore, you must purchase the access code on your own.
- If you choose **not to opt out a code will be emailed to you** which will provide you access to the class materials for the remainder of the semester after Add/Drop date.
- PLEASE check your email (colostate.edu address) after Add/Drop date to receive the full code.

# Opting Out of Inclusive Access

• If you choose an alternate method of access to the online content and homework platform, you must **opt out** of the Inclusive Access program prior to the Add/Drop date to avoid billing. **To opt out, you will need to follow a link provided, in an email, from the bookstore.** 

#### **Important Dates:**

- \* February 5, 2020 Opt Out Date
- \* February 10, 2020 Charges will show on your student account

#### SmartBook ASSIGNMENTS IN McGRAW-HILL CONNECT

There are a total of 24 SmartBook assignments (one for each assigned chapter) in McGraw-Hill Connect. Each SmartBook assignment is worth 3 points. The SmartBook assignment due dates can be found in the course schedule at the end of the syllabus, in canvas and on the McGraw-Hill site.

https://connect.mheducation.com/class/k-raines-bz-110-section-001-spring-2020

#### COLORADO STATE UNIVERSITY CANVAS

Power point slides, study guides, reference materials and grades will be posted in Canvas (<a href="http://info.canvas.colostate.edu/login.aspx">http://info.canvas.colostate.edu/login.aspx</a>).

A Canvas app is also available for smart phones and available free of charge to Canvas users.

## **SMALL GROUPS**

On numerous occasions throughout the semester, there will be opportunities for small group discussions and in-class group assignments. All students will be expected to participate in small group discussions and in-class group assignments. Points will be awarded for participation in discussions or completion of selected in-class assignments.

## **iClicker**



Each student will need an iClicker for the course. To register your iClicker remote go into canvas and select "iClicker" on the left side. Your iClicker should be registered by class time on **Tues**, **Jan 28**. Students will be tested on current and previous course content using iClickers beginning the second week of class. Each student will be graded on participation with a possible of 20 total points for the semester. To receive all 20 participation points a student must answer 70% or more of the questions. Participation points will not be awarded in the case of absences related to health issues, travel, family emergencies or forgotten or inoperable iClickers.

#### **TESTS**

There will be 3 hourly exams (120 pts/exam) and a final exam (240 pts). Exam questions will be multiple choice. Study guides and practice exams will be available in canvas 7-10 days before each exam. The instructor will also hold question and answer sessions, outside of class, before each exam. The lowest hourly exam grade will be dropped. **The final exam is a cumulative exam and is mandatory.** 

If a student has a conflict with a test date, the student may meet with the instructor and request to take the test at an **earlier time**. **There are no makeup exams and no extra credit!!** Please keep in mind that illnesses, accidents, family emergencies, etc. do happen, so don't assume the drop policy allows you to "blow off" a test.

## **GRADES**

Exam grades and exam keys will be posted in canvas within 1-3 days after an exam date. To calculate final course grades the total number of points earned (exam scores – lowest exam + SmartBook assignments + in-class assignments + iClicker points + final exam) will be divided by total points possible (~600). The average will be multiplied by 100 and the grades will be assigned using the scale shown below.

Letter Grade	Numerical Equivalen
A+	98-100
Α	93-97
Α-	90-92
B+	87-89
В	83-86
B-	80-82
C+	77-79
С	70-76
D	60-69
F	0-59

## **NEED HELP?**

If you are feeling depressed, overwhelmed or experiencing a mental health emergency, counseling services has trained professionals who can help. Contact 970-491- 6053 or go to 3<sup>rd</sup> floor of the CSU Health and Medical Services building. If you are concerned about a friend or peer, tell someone by calling 970-491-1350 to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources (http://safety.colostate.edu/tell-someone.aspx ). In the case of a life-threatening emergency, call 911.

Other resources include:

#### **TELEPHONE SERVICES**

**CSU Health Network On-Call Counselor**: (970) 491-7111 – The on-call staff member will typically return the call within 15 minutes.

Colorado Crisis Services/Suicide Prevention Lifeline: (970) 494-4200 or (844) 493-TALK (8255)

National Suicide Prevention Lifeline: (800) 273-TALK (8255)

Transgender Suicide Prevention Hotline (Trans Lifeline): (877) 565-8860

## 24/7 WALK-IN MENTAL HEALTH SERVICES

## **SummitStone Community Crisis Clinic**

1217 Riverside Ave., Fort Collins, CO 80524 (970) 494-4200

## 24/7 EMERGENCY ROOM SERVICES

## **Poudre Valley Hospital**

1024 S Lemay Ave, Fort Collins, CO 80524 (970) 495-7000

## **Banner Fort Collins Medical Center**

4700 Lady Moon Dr., Fort Collins, CO 80528 (970) 821-4000

## <u>UCHealth Emergency Room – Harmony</u>

4630 Snow Mesa Dr., Fort Collins, CO 80528 (970) 237-8100

# **COURSE SCHEDULE**

WEEK	TOPIC	CHAPTER
Jan 20-24	Intro to Zoology (on your own) Cells/Tissues/Organs	1 2
Jan 27-31	Cells/Tissues/Organs Cell Division & Inheritance SmartBook (chap 2) due Mon	2 3
Feb 3-7	Cell Division & Inheritance SmartBook (chap 3) due Mon SmartBook (chap 1) due Wed	3
Feb 10-14	Evolution SmartBook (chap 4) due Mon	4
Feb 17-21	EXAM 1 (TUES, FEB 18) Population Genetics SmartBook (chap 5) due Wed	5
Feb 24-28	Ecology Animal Taxonomy (on your own) SmartBook (chap 6) due Mon SmartBook (chap 7) due Wed	6 7
Mar 2-6	Phylum Porifera Phylum Cnidaria Phylum Platyhelminthes SmartBook (chap 9) due Mon SmartBook (chap 10) due Wed	9 10
Mar 9-13	Phylum Annelida SmartBook (chap 12) due Mon EXAM 2 (THURS, MAR 12)	12
Mar 16-20	Spring Break	
Mar 23-27	Phylum Nematoda Phylum Mollusca SmartBook (chap 13) due Wed SmartBook (chap 11) due Wed	13 11

WEEK	TOPIC	CHAPTER
Mar 30-Apr 3	Phylum Arthropoda SmartBook (chap 14) due Mon SmartBook (chap 15) due Wed	14 & 15
Apr 6-10	Phylum Echinodermata Phylum Chordata SmartBook (chap 16) due Mon SmartBook (chap 17) due Wed	16 17
Apr 13-17	Survey of the vertebrates SmartBook (chap 18) due Mon SmartBook (chap 19) due Wed EXAM 3 (THURS, APR 16)	18-19
Apr 20-24	Survey of the vertebrates SmartBook (chaps 20-21) due Mon SmartBook (chap 22) due Wed	20-22
Apr 27-May 1	Circulation & Gas Exchange Nutrition & Digestion SmartBook (chap 26) due Mon SmartBook (chap 27) due Wed	26 27
May 4-8	Reproduction & Development SmartBook (chap 27) due Mon	29
May 11	FINAL EXAM MON @ 9:40 am in Yates 104	