



University of North Texas at Dallas

Fall 2025

**SYLLABUS**

**BIOL 4310: Animal Physiology I; 3 hrs.**

<b>Department of</b>	Natural Sciences	<b>School of</b>	Liberal arts and Sciences
<b>Instructor Name</b>	Dr. Nicholas Lorusso		
<b>Office Location</b>	Founders 245		
<b>Email Address</b>	<a href="mailto:Nicholas.Lorusso@untdallas.edu">Nicholas.Lorusso@untdallas.edu</a>		
<b>Office Hours</b>	Tuesday and Thursday – 11-2		
<b>Course Format/Structure</b>	Online		
<b>Class Meeting Days &amp; Times</b>	Online		
<b>Course Catalog Description</b>	This course will explore the basic principles of animal physiology, including the associated basic principles of animal anatomy and environmental influences on physiology. We will discuss species variety, classification, and biogeographic relationship with physiology as well as histology and nutrition. AGRI 4310 and BIOL 4310 are equivalent.		
<b>Prerequisites</b>	AGRI 1331: The Agricultural Industry or BIOL 1710 or BIOL 1132 or GEOG 1710 or equivalent course		
<b>Required Text</b>	Zoology by Miller and Tupper with McGraw-Hill Connect Code		
<b>Access to Learning Resources</b>	<b>UNT Dallas Library:</b> Phone: (972) 338-1616; Website URL: <a href="http://www.untdallas.edu/library">http://www.untdallas.edu/library</a> <b>UNT</b> <b>Dallas Bookstore:</b> Phone: (972) 780-3652; Website URL: <a href="http://www.untdallas.edu/bookstore">http://www.untdallas.edu/bookstore</a> Email: <a href="mailto:untdallas@bkstr.com">untdallas@bkstr.com</a>		

<p><b>Canvas Resources</b></p> <p><b>Supported Browsers:</b></p> <p>☐ Chrome 67 &amp; 68</p>	<p>Canvas will be used in this course for several key functions including:</p> <ul style="list-style-type: none"> <li>• Gradebook management</li> <li>• Assignment of required course homework</li> <li>• Course Exams</li> </ul>
<ul style="list-style-type: none"> <li>• Firefox 60 &amp; 61</li> <li>• Flash 29, 30 (for audio/video)</li> <li>• Respondus Lockdown Browser</li> <li>• Safari 10, 11</li> </ul> <p><b>Supported Devices:</b></p> <ul style="list-style-type: none"> <li>• iPhone</li> <li>• Android</li> <li>• Chromebook</li> </ul> <p><i>Note: Tablet users can use the Canvas app</i></p> <p><b>Screen Readers:</b></p> <ul style="list-style-type: none"> <li>• VoiceOver (Safari)</li> <li>• JAWS (Internet Explorer)</li> <li>• NVDA (Firefox)</li> </ul> <p><i>Note: There is no screen reader support for Canvas in Chrome</i></p>	<p>☐ Submission of digital assignments</p> <p><b>Getting Help with Canvas:</b></p> <p><b>Canvas 24/7 Phone Support for Students: 1-833-668-8634</b></p> <p><b>Canvas Help Resources:</b></p> <p><b>Canvas Student Guide -</b>  <a href="https://community.canvaslms.com/docs/DOC-10701">https://community.canvaslms.com/docs/DOC-10701</a></p> <p>For additional assistance, contact Student Assistance (UNT Dallas Distance Learning):</p> <p>DAL1, Room 157  Phone: 972-338-5580  Email: <a href="mailto:distancelearning@untdallas.edu">distancelearning@untdallas.edu</a></p> <p><b>If you are working with Canvas 24/7 Support to resolve a technical issue, please keep me updated on the troubleshooting progress.</b></p> <p><b>If you have a course-related issue (e.g., course content, assignment trouble, quiz difficulties), please contact me during office hours or by email.</b></p>

## Course Overview

### Course Goals/Overview:

The goal of this course is to evaluate the evolution of invertebrates and vertebrates using principles of comparative anatomy and physiology. Morphological and functional changes correlated with varied environments and adaptations that gave rise to a diversity of life forms.

**Learning Objectives/Outcomes:**

At the end of this course, the student will

1. Independently apply the knowledge of fundamental concepts and principles to characterize living organisms and biological functions.
2. Analyze phylogenetic trees and taxonomic classes.
3. Explain and apply biological principles to understand current issues in zoology.
4. Effectively find, organize, and use resources from the literature to present oral, visual and written communications of zoological analyses.
5. Understand the intersection of zoological analysis and basic research and/or health-care work.
6. Prepare zoology-specific lab reports.

**Course Outline**

**This schedule is subject to change by the instructor. Any changes will be communicated in course announcements on Canvas, in class, and in updated syllabi**

Unit Number and Title	Readings/Resources	Learning Activities/Point Values
Unit 1 - Introduction to Zoology and Ecology	Miller Chapter 6	Discussion-15 Points Reading Quiz – 10 Points HW 1 – 10 Points
Unit 2 – Animal Cells	Miller Chapter 2	Discussion-15 Points Reading Quiz – 10 Points HW 2 – 10 Points
Unit 3 – Animal Taxonomy and Groups	Miller Chapter 7	Discussion-15 Points Reading Quiz - 15 Points HW 3 – 10 Points
Unit 4 – Animal Origins and Features	Miller Chapter 8	Discussion-15 Points Reading Quiz – 15 Points HW 4 – 10 Points
Unit 5 – Week of Exam 1	N/A	Discussion-10 Points Exam 1 – 200 Points
Unit 6 – Nutrition	Miller Chapter 27	Discussion-15 Points Reading Quiz – 15 Points HW 5 – 10 Points

Unit 7 – Environments and Temperature control	Miller Chapter 28	Discussion-15 Points Reading Quiz – 15 Points HW 6 – 10 Points
Unit 8 – Neurons	Miller Chapter 24	Discussion-15 Points Reading Quiz – 15 Points HW 7 – 10 Points
Unit 9 – Endocrine	Miller Chapter 25	Discussion-15 Points Reading Quiz – 15 Points HW 8 – 10 Points
Unit 10 – Week of Exam 2	N/A	Discussion-10 Points Exam 2 – 200 Points
Unit 11 – Circulation and Gas Exchange	Miller Chapter 26	Discussion-15 Points Reading Quiz – 15 Points HW 9 – 10 Points
Unit 12 – Support and Movement	Miller Chapter 23	Discussion- 15 Points Reading Quiz – 15 Points HW 10 – 10 Points
Unit 13 – Reproduction	Miller Chapter 29	Discussion-15 Points Reading Quiz – 15 Points HW 11 – 10 Points
Unit 14 – Structural Comparison of the Tetrapods	Miller Chapter 9-22	Discussion-15 Points Reading Quiz – 15 Points HW 12 – 10 Points
Unit 15 - Evolution	Miller Chapter 5-6	Discussion-15 Points Reading Quiz – 15 Points HW 13 – 10 Points
Unit 16 – Week of Exam 3	N/A	Exam 3

Note: Initial HW due dates are the ACTUAL due dates for HWs. If you miss a deadline but submit the homework by the deadline, however, you can earn half credit for that homework assignment!

## Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

- **Exams** – Three non-cumulative exams will be given during their own units on the syllabus. While the exams will not be directly cumulative, biology is a subject in which content builds on itself. Exams are based on lecture slideshow content and will be available on Canvas using Respondus.

Exams will be composed of multiple-choice questions (~75% of exam points) and short answer (~25% of exam points). Example exam questions will be reviewed in the lecture period directly before the exam.

- **Assignments** – Fourteen total homework assignments will be completed using the textbook companion site through McGraw-Hill Connect. Homework assignments are designed to take ~30 minutes and can be improved using the available (but not required) Adaptive-Follow-ups (which create questions based on missed answers)

While you can submit homework for a chapter at any point until the exam that chapter is a part of – full credit can only be received if the assignment is submitted by the deadline in the syllabus above.

- **Reading Quizzes** – There are a total of 13 quizzes, given using Canvas, which will have ~4 short answer or other longer format questions. They are meant to help you make connections between parts of a chapter and, while mostly graded on effort, need to be completed by the deadline. **Please note that Turnitin and a Chegg screening will be used on answers.**
- **Discussions:** Weekly discussion posts are meant to simulate conversations we would have as part of a course period. General requirements will be reviewed during the first discussion but the general policy is available below.

### Discussion Questions Policy

In each unit students will be required to actively participate in the graded Discussions. In these areas of the course a student can interact with the instructor and classmates to explore questions and comments related to the content of this course.

The discussions will be graded for:

1. **Frequency:** Number and regularity of your discussion comments
2. **Quality:** Content of your contributions
3. **Timeliness:** When the initial response to the Discussion Question was posted.

Frequency — Number and regularity of contributions. Students are expected to log into the course and post (respond) in each of the unit's discussion topics on a minimum of three separate days that the unit is open. In order to earn full credit three quality posts must be provided during the unit. The student's response to the initial discussion question can count as part of the three required posts.

**Point Breakdown:**

Gradable Item	Point Value
Exam 1	200
Exam 2	200
Exam 3	200
Discussion Posts	215
Assignments	185

**Grade Determination:**

**A = 90% or better**

**B = 80 – 89 %**

**C = 70 – 79 %**

**D = 60 – 69 %**

**F = 60%**

**Course-Specific Policies****Attendance and Participation Policy:**

The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at <https://www.untDallas.edu/hr/upol>. While the normal university policy applies – I also strongly suggest you attend lecture because I use a lot of interactive elements like Q&A about assignments and daily bonus point polls which can only be accessed fully during class time.

**Assignment Policy:**

*Assignments are due by the due date and are eligible for full credit at that time. Late assignments are accepted: -*  
For half credit if submitted by the exam the assignment is on – no credit is given after the exam the chapter homework accounts for.

**Exam and Quiz Policy:**

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Policy 7.005 Student Attendance at <https://www.untDallas.edu/hr/upol>).

Quizzes are available for two days (Thursday and Friday) via Canvas and are timed. Only documented emergencies open exams after the deadline for quiz completion.

**Policies on class and contact:**

-Electronic device use is welcomed, especially for participation in interactive elements like polls. If use becomes disruptive you may be asked to modify your use and inappropriate use will result in being asked to end use of electronic devices

- Eating and drinking during lecture is allowed (on campus) but please be kind to your peers. Keeping energy up is important but if food/drink becomes a distraction this policy may be modified
- Notes on getting help out of the classroom:
  - 1) Office hours are “walk-in” but you can sign up for up to one hour by visiting [<tinyurl.com/LorussoF25>](https://tinyurl.com/LorussoF25)
  - 2) I try very hard to respond to emails within 24 hours! If you do not hear from me within that time frame please try resending your email or calling my office phone. In the event of high email volume I may reply to you to acknowledge your message and give you a time frame for a full response. **Please include your course number and a brief subject in the subject of your email to make tracking/resolving your issue easier.**
  - 3) If you have a general question/issue (“I can’t find the powerpoint for chapter 6” “Where is the homework for this week?”) Try posting to the course help discussion on Canvas! This might help other students and I will check the forum everyday for issues.

## **University Policies and Procedures**

### **Students with Disabilities (ADA Compliance):**

#### **Chapter 7(7.004) Disability Accommodations for Students:**

The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodations must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see [Disability Services Office](#). You may also contact them by phone at 972-338-1777; by email at [UNTDdisability@untDallas.edu](mailto:UNTDdisability@untDallas.edu) or at Building PL, room 1104.

### **Disruptive Behavior in an Instructional Setting:**

Students are expected to engage with the instructor and other students in this class in a respectful and civil manner at all times to promote a classroom environment that is conducive to teaching and learning. Students who engage in disruptive behavior will be directed to leave the classroom. A student who is directed to leave class due to disruptive behavior is not permitted to return to class until the student meets with a representative from the Dean of Students Office. It is the student’s responsibility to meet with the Dean of Students before class

meets again and to provide the instructor confirmation of the meeting. A student who is directed to leave class will be assigned an unexcused absent for that class period and any other classes the student misses as a result of not meeting with the Dean of Students. The student is responsible for material missed during all absences and the instructor is not responsible for providing missed material. In addition, the student will be assigned a failing grade for assignments, quizzes or examinations missed and will not be allowed to make up the work.

The Code of Student's Rights, Responsibilities, and Conduct (Policy 7.001) describes disruption as the obstructing or interfering with university functions or activity, including any behavior that interferes with students, faculty, or staff access to an appropriate educational environment. Examples of disruptive behavior that may result in a student being directed to leave the classroom include but are not limited to: failure to comply with reasonable directive of University officials, action or combination of actions that unreasonably interfere with, hinder, obstruct, or prevents the right of others to freely participate, threatening, assaulting, or causing harm to oneself or to another, uttering any words or performing any acts that cause physical injury, or threaten any individual, or interfere with any individual's rightful actions, and harassment. You are encouraged to read the Code of Student's Rights, Responsibilities, and Conduct for more information related to behaviors that could be considered disruptive.

#### Canvas Instructure Accessibility Statement:

University of North Texas at Dallas is committed to ensuring its online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technologies, please contact our ITSS Department. To better assist them, you would want to have the operating system, web browser and information on any assistive technology being used. [Canvas Instructure Accessibility Statement is also provided.](#)

**NOTE:** Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e. MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

#### **Course Evaluation Policy:**

Student's evaluations of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

**Assignment Policy:** Assignment due dates in the syllabus and on canvas are the only way to ensure that full credit can be gained for a particular assignment. It is possible, however, to still receive 50% credit for a late assignment so long as it is submitted by the week of the exam the assignment is part of.



**Exam Policy:** Exams will be available for the entire week scheduled on the syllabus but require both respondus monitor and respondus lockdown browser.

### **Academic Integrity:**

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to [UNT Dallas' Student Code of Academic Integrity](#) for complete provisions of this code.

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Web-based Plagiarism Detection: Please be aware in some online or hybrid courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.

### **Classroom Policies**

#### **Online Attendance and Participation:**

The University attendance policy is in effect for this course. Class attendance in the Canvas classroom and participation is expected because the class is designed as a shared learning experience, and because essential information not in the textbook will be discussed in the discussion board. Online presence and participation in all class discussions is essential to the integration of course material and your ability to demonstrate proficiency.

Attendance for this online or hybrid course is considered when you are logged in and active in Canvas, i.e., posting assignments, taking quizzes, or completing Discussion Boards. To maintain financial aid award eligibility, activity must occur before the census date of the session or term of the course. Refer to [UNT Dallas' Registrar](#) for specific dates. If you are absent/not active in the course shell, it is YOUR responsibility to let the instructor know immediately, upon your return, the reason for your absence if it is to be excused. All instructors must follow university policy 7.005 covering excused absences; however, it is the instructor's discretion, as outlined in the course syllabus, of how unexcused absences may or may not count against successful completion of the course.

**Inclement Weather and Online Classes:** Online classes may or may not be effected by campus closures due to inclement weather. Unless otherwise notified by your instructor via e-mail, online messaging, or online announcement, students should assume that assignments are due as scheduled.

**Online “Netiquette”:**

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. Emails, Discussion Board messages and/or any other forms of written communication in the online environment should use proper “netiquette” (i.e., no writing in all caps (usually denotes yelling), no curse words, and no “flaming” messages (angry, personal attacks)).

Racial, ethnic, or gender slurs will not be tolerated, nor will pornography of any kind.

Any violation of online netiquette may result in a loss of points or removal from the course and referral to the Dean of Students, including warnings and other sanctions in accordance with the University’s policies and procedures. Refer to [UNT Dallas Student Code of Conduct](#). Respect is a given principle in all online communication. Therefore, please be sure to proofread all of your written communication prior to submission.

**Diversity/Tolerance Policy:**

*Students are encouraged to contribute their perspectives and insights to class discussions in the online environment. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Dean of Students as the instructor deems appropriate.*

**Technology Assistance:** In order to successfully access the materials in an online or hybrid course, UNT Dallas advises that your computer be equipped with the minimum system requirements listed on the first page of the syllabus.

If you experience difficulty accessing or using components of the course, try using Google Chrome browser. If you still experience technical difficulties, first, notify your instructor.

If the problem is still not resolved, call Student Assistance (Distance Learning) at the phone number listed on the first page of the syllabus. Also, no matter what browser you use, always enable pop-ups. For more information see:

- [UNT Dallas Canvas Technical Requirements](#)
- [Canvas Instructure Supported & Unsupported Operating Systems](#)