

University of North Texas at Dallas

SYLLABUS Fall 2104

Course Abbreviation BIOL 1082-18627/Lab 18628 Biology for Educators/Semester Hrs 3

Department of Health and Life Sciences		Division of Liberal Arts & Life Sciences
Instructor Name:	Dr. Lynda Folts	
Office Location:	Room 302, Founders Hall	
Office Phone:	972-322-4265	
Email Address:	lynda.folts@untdallas.edu	
Office Hours:	Wednesday 10:30 - 12:30 pm; or by appointment	
Virtual Office Hours:	Lecture: Online	
Classroom Location:	Laboratory: Room 256, Founders Hall (DAL2)	
Class Meeting Days & Times:	TBD	
Course Catalog Description:	Develop a meaningful and functional command of key biological concepts; an understanding of the interrelationships among all living things; and a correlation between what pre-service teachers are required to learn and what they will be required to teach. Includes laboratory. BIOL 1082D is a general biology course with laboratory designated for elementary and middle school education majors for seeking teacher certification. Note: this course may not be used to satisfy the laboratory science requirement for majors in the College of Arts and Sciences	
Prerequisites:	None	
Co-requisites:	BIOL 1082 Laboratory	
Required Text:	Lecture: Audesirk T, Audesirk G, Byers BE. 2014. Biology: Life on Earth with Physiology. Tenth Edition. Pearson Education, Inc., Glenview, IL, United States of America. ISBN-13: 978-0-321-79426-0	
Recommended Text and References:	Laboratory Manual: Janice Nath & John Ramsey: Preparing to Teach Texas Content Areas 2nd Ed. ISBN-13: 978-0-13-704028-5 Pearson Education, Inc. Glenview, IL, United States of America.	
Access to Learning Resources:	UNT Dallas Library: phone: (972) 338-1616; web: http://www.untdallas.edu/our-campus/library UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fheg.follett.com	
Course Goals or Overview:		
	The goal of this course is to provide the student with a broad background in biology that can be used in elementary and secondary education. This course will provide a brief overview of the major topics within the biological sciences	
Learning Objectives/Outcomes:		
BIOL 1082 Course Objectives- Lecture * (Bloom's Taxonomy Correlation)		
At the end of this course, the student will		
1. Students should be able to demonstrate understanding, illustration, and design of both the evolution of land plants and the evolution of vertebrates/tetrapods/amniotes providing several steps along the way in the process. *UNDERSTAND/ILLUSTRATE/CREATE		
2. Students should demonstrate understanding, design and illustration of general ecological concepts,		

including major biomes, ecosystems interactions, the carbon cycle, the greenhouse effect, and global climate change. *APPLYING/UNDERSTANDING/CREATE
3. Students should demonstrate understanding of the concept of a carbon footprint, and describe the science of conservation biology. *UNDERSTANDING/REMEMBERING
4. Students should demonstrate understanding of the scientific method, and apply associated terminology, such as hypothesis, theory, methods and conclusion. *UNDERSTANDING/APPLYING
5. Students should demonstrate understanding of evolution theory, apply the mechanisms of evolution (especially natural selection), the evolution of populations and species, and the underlying support for evolution. They should also understand the historical context in which this theory was originally formed. *UNDERSTANDING/APPLYING
6. Students should be able to illustrate working knowledge of the history of life on Earth and design research into the origin of life. Students should have a sense of geologic time and the fossil record and the roles of changing environmental conditions, mass extinctions, endosymbiosis, and the rise of eukaryotic cells play in the evolution of life on Earth. *APPLY/CREATE
7. Students should demonstrate understanding of how to interpret a phylogenetic tree, describe basic understanding of the mechanisms by which they are created, and demonstrate general understanding of the principles involved in grouping organisms on an evolutionary tree. *REMEMBER/UNDERSTAND
8. Students should be able to demonstrate, describe and interpret understanding of distinguished differences between organisms in all three domains of life, and to give identifying characteristics of each. *REMEMBER/UNDERSTAND
9. Students should be able to demonstrate and determine the distinguished differences between some groups of prokaryotes, some groups of protists, the 4 main groups of land plants, 5 clades of fungi, and both invertebrate and vertebrate animals. *ANALYZE/EVALUATE

BIOL 1082 Course Objectives- Lab

1. Students should be able to demonstrate, describe, interpret, and communicate appreciation of the diversity of life, both extant and extinct, including our local unique ecosystem. *UNDERSTAND/REMEMBER
2. Students should be able to demonstrate knowledge of distinguish and communicate basic laboratory and field skills, such as microscopy, anatomical dissection, quadrat plotting, etc. *ANALYZE
3. Students should be able to demonstrate knowledge of illustrate, determine, and communicate the components of a scientific lab report and be able to demonstrate writing a lab report, including data description, analysis, graphing, and drawing conclusions. *APPLY/EVALUATE
4. Students should be able to demonstrate, design and communicate identification and or creation of testable hypotheses, as well as communicate predictions based on those hypotheses. *CREATE

Course Outline

This schedule is subject to change by the instructor.
Any changes to this schedule will be communicated by Dr. Folts

Online Lecture Schedule		
Week/Date	Topic	Chapters/Assignments Due
1. Aug. 25-31	Intro. to Biology/Atoms and Molecules	1-3 Assignment 1-ch.1-3- due 8/31
2. Sept. 1-6	Cells, Membranes, and Flow of Energy	4-6
3. Sept. 7-13	Photosynthesis, Glycolysis, Cell reproduction	7-9
4. Sept. 14-20	Inheritance, Heredity, Gene Expression	10-12
5. Sept. 21-27	Biotechnology, Evolution, Populations	13-15 Assignment 2-ch. 4-6 due 9/21
6. Sept.28-Oct 4	Origins, History, Systematics	16-18 Assignment 3-ch. 7-9 due 10/5
7. Oct. 5-11	Prokaryotes, Protists, Plants	19-21 Assignment 4-ch.19-21 due 10/12
8. Oct. 12-18	Fungi, Invertebrates, Vertebrates	22-24 Assignment 5-ch.22-24 due 10/19
9. Oct. 19-25	Animal Behavior, Pop. Growth, Community	25-27
10.Oct. 25- Nov. 1	Nutrient Cycling, Ecosystems, Biodiversity	28-30 Assignment 6-ch.25-27 due 10/26
11. Nov. 2-8	Homeostasis, Circulation, Respiration	31-33 Assignment 7-ch.31-33 due 11/9
12. Nov. 9-15	Nutrition, Urinary System, Disease Defense	34-36 Assignment 8-ch.34-36 due 11/16
13. Nov. 16-22	Endocrine System, Nervous, Senses	37-39 Assignment 9-ch.37-39 due 11/23
14. Nov. 23-29	Muscles, Skeleton, Animal Reproduction/Dev.	40-42
15. Nov.30-Dec. 6	Plant nutrients, Reproduction, Responses	43-45 Assignment 10-ch.43-45 due 12/7
16. Dec. 7-10	Final Exam (online)	All chapters

Online Discussion Boards and Exams		
Due Date	Materials	Points
August 31	Lecture D. Board 1	20
September 28	Lab D. Board 1- Chapter 4	20
October 5	Lecture D. Board 2	20
October 10	Exam 1	100
October 19	Lab D. Board 2- Chapter 15	20
October 26	Lecture D. Board 3	20
November 7	Exam 2	100
November 9	Lab D. Board 3- Chapter 27	20
November 9	Lab D. Board 3- Chapter 27	20
November 16	Lecture D. Board 4	20
November 23	Lecture D. Board 5	20
November 23	Lab D. Board 4- Chapter 34	20
November 30	Exam 3	100
December 7	Lab D. Board 5- Chapter 40	20
December 9	Final Exam	100

Course Evaluation Methods

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

Lecture

Exams (300 points) – You will be given four in-class examinations. Each exam is worth 100 points, and will consist of a combination of multiple choice, true-make true, short answer, and essay items. Attendance is required for all exams. Any student found cheating on any exam will receive a zero (0) for that exam and may face other disciplinary action(s). In addition, a final comprehensive exam is required and it is worth 100 points.

Final Exam (100 points)- Comprehensive all Chapters

Assignments (10@ 20points each=200)

Discussion Boards –Lecture (5 @ 20 points each=100 points)

Laboratory

Discussion Boards –Lab (5 @ 20 points each=100 points) Fom Case Studies in the Textbook.

Lab Lesson plan blogs- You will have the opportunity to freely produce and share your lesson plans with the class on the Blog page. This will give you hands-on real-world applications of the lecture material and opportunity to produce and share possible lessons you might use in a future classroom setting.

You do not receive a separate grade for lab, so the points received for the laboratory (out of 100) will be added into the lecture grade calculation.

Note: The lab is worth 25% of your final overall grade for the course. However, you must receive a passing grade (70% or higher) in the laboratory to receive a passing grade in the class.

Students must pass both the lecture and the lab independently to pass the course (i.e. if you fail the lab, you automatically fail the entire course and if you fail the lecture, you automatically fail the entire course).

Grading Matrix:

Instrument	Value (points)	Total
Exam1	100-12.5%	100
Exam 2	100-12.5%	100
Exam 3	100-12.5%	100
5 Discussion Boards (Lecture) 20pts.	100-12.5%	100
5 Discussion Boards (Laboratory) 20pts.	100-12.5%	100
Final Exam	100-12.5%	100
Assignments 10@20pts.	200-25%	200
Total	100%	800

Grade Determination:

A = 800 -720 pts.	90% or better
B = 640- 719 pts.	80 – 89 %
C = 560 -639 pts.	70 – 79 %
D = 480 -559 pts.	60 – 69 %
F = 479 pts. or below	less than 60%
I = Incomplete grade	

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. 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 the SETE to be an important part of your participation in this class.

Assignment Policy:

Assignments are intended to reinforce material covered in lecture, and prepare you for the exams. Collaborative efforts on completing the assignments are encouraged so long as all member of the collaboration contribute equally. As with all other graded assessments, cheating will not be tolerated. While collaborations are encouraged, each student must submit their own work, which cannot be identical to the work submitted by the other members of the collaboration. Assignments should be turned in on time. Late assignments will be graded, but with a penalty of 10% each day it is late.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook). Any student caught cheating will automatically receive a 0 on the exam, and the instructor may pursue further disciplinary action. After the first exam is turned in, no more exams will be distributed to students that arrive late to the exam period.

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 the Student Code of Academic Integrity at <http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf> for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance 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 class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. 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 Office of Student Life as the instructor deems appropriate.

Use of Electronic Gadgets in the Classroom

You are allowed to take notes using laptops/iPads/other electronic devices. You are allowed to record the lectures. The instructor reserves the right to ask you to discontinue use of an electronic device if it becomes disruptive to others in the classroom.

Food/Drink Policy

No food or drinks are allowed in the classroom or the laboratory, except for water.

Course Policies and Procedures**Late work and make-up exams**

*No late assignments will be accepted without obtaining prior authorization or proving validity of absence. In such a case, the assignment should be turned in at the beginning of the following lab session (no later than one week after the due date). Exams will only be administered on the dates provided in the syllabus. If you will be observing a religious holy day that is coincidental with an exam, make your instructor aware before its observance. Make-up exams will be administered during the class period **preceding** the regular exam date.*

Cell phone policy

Do not use your cell phone in class; this includes calling, texting, internet surfing, and gaming. If your cell phone must be on during class, apply its "silent" settings. If you keep your phone on during class time, do not keep it on top of the table you are sitting at, please keep it in your pocket, purse, or bag. If your phone rings during an exam, even if the silent setting has been applied, you must turn in your exam immediately.

Laptop policy

You may use your laptop in class to take notes, but only to take notes. If it becomes apparent that laptops are being used by the student for activities other than lecture note taking, all laptop use will be prohibited during class time. Laptops are not to be used during exams. If you bring a laptop to an exam, it must remain in a bag and under the table.

Cheating and plagiarism

Cheating will not be tolerated in this course. If you are found cheating on an assignment or exam, you will not receive credit for the assignment/exam, and student services will be notified. Cheating includes using unauthorized material or devices on an exam, the work of another individual without proper citations, using larger portions of another's work, even with proper citations, and copying the work of a classmate. There are no exceptions to this policy.