

**University of North Texas at Dallas
Spring 2013
SYLLABUS**

BIOL 1082D: BIOLOGY FOR EDUCATORS 3 hrs

Department of	Life & Health Sciences	Division of	Liberal Arts & Life Sciences
Instructor Name:	Donna L. Chevalier		
Office Location:	305, Founder's Hall		
Office Phone:	972-338-1501 Dept (messages only)		
Email Address:	donna.chevalier@unt.edu		
Office Hours:	2:00 - 3:00 pm Sat ; 1:00 - 2:00 pm Mon ; 2:00 - 3:00 pm Wed (if you need another time, please email or see me before /after class to make arrangements)		
Virtual Office Hours:	N/A		
Classroom Location:	DAL2 213 (LECTURE); DAL2 256 (LAB)		
Class Meeting Days & Times:	Sat 9:00 am - 11:50 am ; (Lab) Sat 12:00 pm - 1:50 pm		
Course Catalog Description:	<p>1082. Biology for Educators. 3 hours (3;3). 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. Biology 1082 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.</p> <p>The course is intended 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.</p>		
Prerequisites:			
Co-requisites:	MUST REGISTER FOR BIOL 1082.391 & BIOL 1082D.091 CONCURRENTLY		
Required Text:	TITLE: Biology: Life on Earth w/Physiology (w/out Mastering Bio) AUTHOR: Audesirk EDITION:9th COPYRIGHT YEAR:2011 PUBLISHER: Benjamin-Cummings Publishing Company ISBN:9780321598462		
Recommended Text and References:			
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm 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 understanding of biology at the cellular level		
Learning Objectives/Outcomes:	<ol style="list-style-type: none"> 1 Explore the natural sciences. 2 Be able to locate, evaluate and organize information including the use of information technologies. 3 Be able to think critically and creatively, and learn to apply different systems of analysis. 4 Develop problem solving skills that incorporate multiple viewpoints and differing contexts in their analysis. 5 Cultivate intellectual curiosity and self-responsibility, building a foundation for life-long learning. 6 Engage with a variety of others in thoughtful and well-crafted communication. 7 Broaden and refine their thinking as a part of the give and take of ideas, seeking to better understand other's perspectives as well as their own. 		

Learning Objective/Outcome Assessments:

These learning objectives/outcomes noted on pg 1 will be assessed through specific assignments given during the semester. These include:

Objective 1 – 3, 5:

Students perform collaborative (group) projects for laboratory assignments in which they research various topics.

The presentation topics are located in the lab manual. Unit one (topics on p. 29) is about cellular processes, unit three (topics on p. 105) is about human maladies/disorders & means of treatment, unit four (topics on p. 131) is about earth's organisms, the semester project (topics on p. 2) is a presentation on an experiment they conduct. Each presentation (except the semester project) is worth 20 points (see Presentation Rubric below). The semester project is worth 50 points.

They then, as a group, present the information they have collected to the class using a variety of media including, power point, prezi, posters, or any combination of these. This will introduce them to the tools required for research in many disciplines, and facilitate successful research in the future. Students are graded on the quality of content, quality of presentation, quality of references (one of which must be from the internet), the extent to which they have thought critically about the feasibility of treatment and degree of exploration

Objective 4:

During the third midterm, students are presented **an essay question** (given on a test) in which they compare and contrast mechanisms of evolution and determine which of the mechanisms will consistently lead to adaptive evolution and why.

Objective 6 and 7:

Students will participate in **a class discussion** of evolution and other explanations of the origin of life. Students will be graded on this discussion based on their participation (see below). The format of the discussion varies and may be a traditional discussion or a formal debate. The discussion will be considered to be extra credit.

Rubrics:

Objective 1-3, 5: Presentations (20 points)

1. Content of paper (10 points)
 - a. Does the scope of the paper adequately represent our current understanding of the topic? (5 points)
 - b. Has the material been organized in a clear and accessible manner? (2.5 points)
 - c. Are the tables, figures, diagrams appropriate for the content? (2.5 points)
2. Discussion of feasibility of treatment (5 points)
3. Citations (5 points)
 - a. 5 citations
 - i. 2 refereed publications (2 points)
 - ii. 3 other publications (3 points)
 - b. Are the publications cited correctly in the text and in the "Literature Cited" section?

Objectives 6 and 7: Class Discussion Score	Description
4 – Exceeds expectations	The student contributed to the discussion by offering his/her opinion, or by clarifying a topic of conversation. The information shared by the student will demonstrate that he/she has assimilated course curriculum and curriculum obtained from extra readings, or research, or both.
3 – Acceptable	The student contributed to the discussion by offering his/her opinion, or by clarifying a topic of conversation. The information shared by the student will demonstrate that he/she has assimilated course curriculum
2 – Below expectations	The student contributed to the discussion, but the comments made by the student demonstrated a lack of understanding of course curriculum
1 – Unacceptable	The student did not contribute to the discussion

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by the instructor during regularly scheduled class period.

TOPICS	TIMELINE
1. Chemical nature of life and tour of the cell (Chapters 2-6)	Jan 19 ; Jan 26; Feb 2
2. EXAM 1	Feb 9
3. Cellular processes and genetics (Chapters 9-13)	Feb 9 ; Feb 16; Feb 23 ; Mar 2
4. EXAM 2	Mar 9
5. Evolution and diversity of life (Chapters 14-16, 19-24)	Mar 9 ; Mar 23 ; Mar 30 ; Apr 6
6. EXAM 3	Apr 13
7. Behavior/Ecology/Physiological Systems (Chapters 25-27, 34-35, 38-39)	Apr 13 ; Apr 20 ; Apr 27
8. FINAL EXAM	May 4 at 10 am

TENTATIVE LECTURE SCHEDULE INSTRUCTOR)		(SUBJECT TO CHANGE BY THIS
Date	Topic	Chapters
Jan 19	Course Requirements/Introduction to Biology/Atoms & Molecules	2
Jan 26	Atoms and Molecules (cont'd) ; Cells, Membranes & Enzymes	2, 3 (cont'd) ; 4, 5, 6
Feb 2	Cells, Membranes, and Enzymes (cont'd) Review for Ex 1	4, 5, 6 (cont'd)
Feb 9	Exam 1 ; Mitosis and Meiosis	Ex 1 (Ch 2-6) ; 9
Feb 16	Mitosis & Meiosis (cont'd) ; Genetics and DNA	9 (cont'd) 10, 11
Feb 23	Genetics & DNA (cont'd) ; Transcription, Translation, and Biotechnology	10, 11 (cont'd) 12, 13
Mar 2	Transcription, Translation, and Biotechnology (cont'd); Review for Ex 2	12, 13 (cont'd)
Mar 9 (no class Mar 16)	Exam 2 ; Evolution	Ex 2 (Ch 9-13); 14,15,16
Mar 23	Evolution (cont'd); Viruses, Prokaryotes, and Protists	14, 15,16 (cont'd) 19,20
Mar 30	Viruses, Prokaryotes, and Protists (cont'd); Plants, Fungi, and Animals	19, 20 (cont'd) 21, 22, 23, 24
Apr 6	Plants, Fungi, and Animals ; Review for Ex 3	21, 22, 23, 24 (cont'd)
Apr 13	Exam 3 ; Animal Behavior	Ex 3 (Ch 4-16, 19-24) ; 25
Apr 20	Ecology // Physiological Systems	26, 27 // 34, 35, 38, 39
Apr 27	Physiological Systems (cont'd) ; Review for Final	34, 35, 38, 39 (cont'd)
May 4	Comprehensive Final on May 4 at 10 am	Comprehensive

Laboratory Schedule		
Date	Lab Experiment Topics / Exercises	Points
Jan 19	Lab Course Requirements / Lab Safety	
Jan 26	Movie: Estrogen Effect	5
Feb 2	Presentations Unit I - Cellular Processes	20
Feb 9	Isolating microbes from the environment	5
Feb 16	Movie: Cane Toads	5
Feb 23	Presentations Unit III - Human Disorders & Treatment	20
Mar 2	Oompa loompa genetics and building a bee-bop	5
Mar 9 (No Lab- Mar 16 due to Spring Break)	Natural Selection	5
Mar 23	Presentations Unit IV - Earth's Organisms	20
Mar 30	Movie: TBD	5
Apr 6	Owl Pellet	5
Apr 13	Semester Presentations (@ Experiment Performed)	50
Apr 20	Zoo Trip	30
Apr 27	No Lab	
	Total points for laboratory	175

Course Evaluation Methods

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

Exams – 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).

Laboratory – **You must receive a passing grade (60% or higher; at least 105 points) in laboratory to receive a passing grade in class.**

Grading Matrix for Course:

Instrument	Value (~ percentages)	Points
Exam 1	15%	100
Exam 2	15%	100
Exam 3	15%	100
Final Exam	30%	200
Laboratory	25%	175
	Total possible points	675

Grade Determination:

A = 89.5 or better.....	604 - 675 points
B = 79.5 - 89.4 %.....	537 - 603 points
C = 69.5 - 79.4 %.....	469 - 536 points
D = 59.5 - 69.4 %.....	402 - 468 points
F = 59.4 or less %.....	≤ 401 points

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.

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.

Attendance will be taken at the beginning of each class, both lecture and laboratory. You must be present the entire time in any laboratory to be able to receive full credit for the lab activity or laboratory report. I will initial all lab worksheets at the end of the lab, once you have completed all lab work and cleaned up your lab bench. If my initials are NOT on your lab worksheets when they are due, I will deduct 20% of the worth of the lab

Assignment Policy:

General notes:

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, especially on lab reports, which cannot be identical to the work submitted by the other members of the collaboration. However, the lab presentations are designed to be a group effort and one presentation/paper is required for the group only.

Regarding Late work and Exams/make-up exams :

No late assignments, including laboratories, will be accepted without obtaining prior authorization or proving validity of absence. Exams should be taken as scheduled and will only be administered on the dates provided in the syllabus. No makeup examinations will be allowed except for documented emergencies OR if you will be observing a religious holy day that is coincidental with an exam (if so, you must make your instructor aware before its observance). Make-up exams for religious holy day observance will be administered directly following the class period **preceding** the regular exam date. Any other allowed make-up exams will be given at the instructor's convenience. (See Student Handbook)

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_Integrity.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.

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.

Other Course Policies:

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. A cell phone may NOT be used in lieu of a calculator.

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 class 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. A Laptop may not be used in lieu of a calculator.

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.

BLACKBOARD:

BLACKBOARD will be used extensively. Each lecture's presentation (in a PowerPoint Slideshow) will be posted on BLACKBOARD. Other important files will also be uploaded to BLACKBOARD for your use, such as review sheets and practice tests. All grades will be maintained in Blackboard.

Lecture Courtesy:

Please be on time and remain in class for the entire time period in which the class is scheduled. Lecture is not a "come and go as you please, anytime you please" class !!! If you come into the classroom, I expect you to stay for the entire class period. If you must leave before the class ends, please do so quietly and I prefer that you do not return to class. Disruptions really bother not only me as I lecture, but to the other students who are trying to focus on the material being discussed and who are actively listening! Any disruptive behavior that interrupts the educational process will not be tolerated. You will be asked to leave and may not return until you have met with me to discuss your behavior.

You will be expected to turn off all cell phones, pagers, IPODS, etc for the duration of the lecture period. Most of you have come to learn. Please respect others by keeping talking to a minimum and phones on silent or vibrate. If you get a call (hey you may have a sick kid etc.) excuse yourself and take the call outside, quietly !!! Better yet, text them, quietly, and tell them you are in class and will get right back to the once class is over !!

Keep food and drink to a minimum. I don't mind water/soda and a candy bar/ bag of chips in lecture, but *please* do not bring in a McDonald's / Whataburger/ etc meal !! It is unprofessional behavior to bring an entire meal into the lecture classroom to eat while we have class. Eat your meal outside the classroom, then come into lecture.

Communication

I will use Blackboard to post any answer keys and supplemental information. I may also email the class occasionally, so please check your university email regularly. If you prefer emails be sent to a non-university account, please provide that to me as soon as you can.

Grade of "Incomplete"

If a student is unable to complete the course due to extenuating circumstances, a grade an incomplete grade "I" may be assigned: The student must have attended class regularly up to **April 19th, 2013** with a passing grade and arrangements must be made with me before the end of the semester. Also note the University will automatically change a grade of "I" to an "F" at the end of the next term, so the missed work must be made up before that time.

Important Dates:

To Withdraw from the Semester (Drop All Courses)

Friday, April 19, 2013

Effective Fall 2012, students wanting to withdraw from the semester (drop ALL [courses for](#) the semester) must do so at the Dean of Student's Office.

[Dean of Student's Office Withdrawal Information](#)

The following chart shows important dates related to withdrawal:

Date(s)	Details
Registration - January 28, 2013	Registration for the semester is noted on the student's transcript, but individual courses are not listed.
Januray 29 - February 22, 2013	An automatic grade of W is assigned.
February 25 - April 19, 2013	A grade of W or WF is assigned for all courses as appropriate. Refer to the Graduate or Undergraduate catalog for more information.