

BIOL 1345: Introductory Biology for Nursing

Section 001

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Office Hours:

Monday and Tuesday: 9:30–10:30 and 12:30–1:30

Time and Place of Class Meeting:

Tuesday and Thursday: 8:00 Life Sciences (LS) 122

Course Description: This course focuses on the chemical and molecular basis of life, including metabolism, cell structure and function, and genetics to provide knowledge of these subjects for those pursuing a degree in nursing.

Modern Biology is an integrative discipline, incorporating elements of Mathematics, Chemistry, Computer Science, and Writing. We expect that you have at least a basic understanding of each of these elements.

Note: This course cannot be applied for credit toward a degree in Biology.

Student Learning Objectives: To gain an understanding of the essential details of cell and molecular biology at an introductory level and gain a basic knowledge of the scientific method.

Text Book: Biology 2e– OpenStax College. This is a free online textbook. You may download and or print it off the website at <https://openstax.org/details/books/biology-2e>. If you prefer a physical book, a copy can be purchased through Amazon (or similar). Either the first or second edition will work. The cost is approximately \$52 for an unused copy.

Additional Required Materials: Students will need an i>clicker 2: by the start of the week of January 21st. These run from \$30-\$60 depending on where you buy one and if it is used or new. The UTA bookstore has them in stock, but they are generally cheaper elsewhere. There is also a mobile app available (REEF). **Using the mobile app is done at your own risk.** The software is often unable to record answers. **It is not possible to make up points missed due to using the app.**

Attendance Policy: I do not take attendance. However, i-clicker questions are given during class only and are a major component of your grade. Also, students who attend class regularly perform better on exams than those who do not. If you miss class, you are responsible for obtaining missed information, class notes, etc. **You cannot make up i-clicker questions for missed classes.**

Expectations for out of class study: Beyond the time required to attend each class meeting, students enrolled in this course should **expect to spend at least an additional 9 hours per week outside of class** in course-related activities, including reading required materials, completing assignments, preparing for exams, etc. This is the foundation for all other Biology classes that you will take, and if you get the basics straight here, it will make your entire degree program easier. Given the fast pace and range of facts and concepts that we cover, this will take a lot of time. There is no way to avoid this, and it is essential that you keep up with the material.

Grading:

- A. Homework—10% of total grade. There will be a homework assignments for every chapter covered in class.
- B. I-clicker questions— 10% of total grade. I-clicker questions are given during lecture class only and will start the week of January 21st. You will receive 66% for simply answering all the questions and full credit for correct answers. Typically there will be 4-8 questions per class. Your lowest 2 i-clicker grades will be dropped. **You must use the same device you initially register for the entire course!** It is not possible to link answers from different devices to the same student. You will not receive points for questions answered on new or borrowed devices.

Note: Using another student's i-clicker constitutes academic dishonesty and will result in the loss of all i-clicker/participation points for all students involved.

- C. Exams—80% of total grade. There will be Five mid-term exams. Each is ~50 multiple choice questions and will cover the subject material from **lecture and the textbook** presented since the last examination. Your lowest exam score will be dropped.
- D. To calculate your grade:
 - a. homework average (0.10) + i-clicker average (0.1) + lecture exam grades (0.8).

Grades:

A = 90-100; B = 80-89; C = 70-79; D = 60-69; F = 59 and below.

Exam Day: Students are required to provide their own scantron **form 4521** (large blue) and a #2 pencil for each test. A photo ID is required for every examination. Students who arrive unprepared may be deducted points. **If the answer is not marked on your scantron, but is circled on your exam, the answer does not count.** Please make sure you mark your scantron correctly and write your LAST NAME then FIRST NAME with a space in-between. Erasures should be called to the attention of the professor at the time the Scantron is turned in on the exam day. Scantrons are copied immediately after the exam. Try to be on time for the test. **You will not be allowed to enter the room if other students have already left.**

Make Up Homework and Exams: Make up exams will be administered *only* in the event of a documented, unavoidable, and unanticipated absence (medical emergency, death in the family, car accident, etc...). Absences due to pre-planned medical procedures or scholastic/athletic/military obligations are also excused provided that documentation is given ahead of time. Other planned absences, do not constitute an excusable absence. There is no make-up for exams or homework missed due to an unexcused absence. **Make up exams will be in an essay format and must be completed before the next exam.** You cannot make-up missed i-Clicker questions.

Grade Grievance Policy: Students have *one week* from the time a grade is posted on Blackboard or provided otherwise to dispute the grade. Grades cannot be contested after this deadline has passed. You will be able to view your most recent exam during office hours for two weeks after the grade is posted

Academic Integrity:

It is the philosophy of The University of Texas at Arlington that academic dishonesty is completely unacceptable will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2). All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

CHEATING IN ANY FORM WILL NOT BE TOLERATED. IF YOU ARE CAUGHT, YOU WILL NOT RECEIVE CREDIT FOR THAT EXAM OR ASSIGNMENT. MOREOVER, THE GRADE FOR THE ASSIGNMENT OR EXAM WILL NOT BE DROPPED OR REPLACED. STUDENTS CAUGHT CHEATING MAY BE DISMISSED FROM LECTURE OR LAB. ALL CASES OF PLAGIARISM OR OTHER CHEATING WILL BE REFERRED TO THE OFFICE OF STUDENT CONDUCT WITHOUT EXCEPTION.

Note: Using another student's i-clicker constitutes academic dishonesty and will result in the loss of *all* i-clicker/participation points for all students involved.

Student Responsibilities:

- A. Familiarize yourself with course syllabus. **YOU** are responsible for this information.
- B. Memorize your lecture section and your professor's name.
- C. **Write your first and last name on anything you turn in to the instructor.**
- D. Show respect for instructor and fellow students at all times.
- E. Adhere strictly to standards of academic honesty, cheating results in an automatic F in the course.
- F. Attend class regularly, **on time**, and remain the entire class period.

Blackboard: **You are responsible for checking Blackboard on a regular basis.** All class notes, grades and information, including this syllabus can be found on Blackboard. If you have any questions, **please check Blackboard first**, if you still cannot find the information you are looking for, then you may email me. **To access blackboard:** elearn.uta.edu

MAVMAIL: All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. **Students are responsible for checking their email regularly.**

***Email Note:** When emailing me, be sure to **include your entire name, your class and your section**. I will not read the email if this information is not available. Be professional and courteous. You should always **address your professors as: Professor or Dr.** and include your full name.

Drop Policy: Students may drop classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their **academic advisor** to drop a class or withdraw. **Undeclared** students must see an advisor in the University Advising Center on the second floor of Davis Hall.

It is the student's responsibility to officially withdraw if they do not plan to attend after registering. *You* are responsible for seeing that all of the proper paperwork is completed and submitted to the appropriate university officials. If this paperwork is not completed, you will receive a letter grade corresponding to your earned grade, including zeros for all missed work. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. Contact the Financial Aid Office for more information.

As a result of recent legislation passed by the Texas Legislature, any student who enrolls in a public institution of higher education as a first-time freshman in Fall 2007 or later will be limited to six dropped courses during the course of their academic career. This applies to UTA course work and course work completed at other Texas public institutions. In addition, a student can only attempt the same course two times. On the third attempt, the student will be charged the equivalent of out-of-state tuition for the course.

Grade Replacement Policy: Students enrolling in a course with the intention of replacing a previous grade earned in the same course must declare their intention to do so at the Registrar's office by Census Date of the semester in which they are enrolled. Grade replacement will not be

allowed if the above procedure is not followed.

Students with Disabilities: If you require an accommodation based on disability, I would like to meet with you in the privacy of my office, during the first week of the semester, to make sure you are appropriately accommodated.

Americans with Disabilities Act (ADA): UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act. All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability

Title IX: The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

Student Support Services: UTA has established a variety of programs to help students meet the challenges of college life. Support to students includes advising, counseling, mentoring, tutoring, supplemental instruction, and writing assistance. For a complete list of academic support services, visit the Academic Assistance resource page of the Office of Student Success Programs, www.uta.edu/uac/studentsuccess/academic-assistance. To help students address personal, academic and career concerns, individual counseling is also available. For more information, students are encouraged to contact Counseling Services www.counseling.uta.edu at (817) 272-3671 or visit a counselor in 216 Davis Hall or send a message to resources@uta.edu.

SOAR Tutoring: SOAR (Students Obtaining Academic Readiness) is located in 132 Hammond Hall and offers free academic support for qualifying students and low-cost services for all students, including Cost Share Tutoring.

Supplemental Instruction (SI): SI leaders are students who sit in your classroom right along with you and provide FREE tutoring for you according to your professor’s coursework. Your SI leader will be introduced to you and provide all their contact information during the first week of class.

Writing Center: The Writing Center, 411 Central Library, offers individual 40 minute sessions to review assignments, *Quick Hits* (5-10 minute quick answers to questions), and workshops on grammar and specific writing projects. Visit <https://uta.mywconline.com/> to register and make appointments. For hours, information about the writing workshops we offer, scheduling a

classroom visit, and descriptions of the services we offer undergraduates, graduate students, and faculty members, please visit our website at www.uta.edu/owl/.

Additional services:

Library Home Page	http://www.uta.edu/library
Subject Guides	http://libguides.uta.edu
Subject Librarians.....	http://www.uta.edu/library/help/subject-librarians.php
Database List	http://www.uta.edu/library/databases/index.php
Course Reserves.....	http://pulse.uta.edu/vwebv/enterCourseReserve.do
Library Tutorials	http://www.uta.edu/library/help/tutorials.php
Connecting from Off- Campus.....	http://libguides.uta.edu/offcampus
Ask A Librarian	http://ask.uta.edu

The following URL houses a page where we have gathered many commonly used resources needed by students in online courses: <http://www.uta.edu/library/services/distance.php>.

The subject librarian for your area can work with you to build a customized course page to support your class if you wish. For examples, visit <http://libguides.uta.edu/os> and <http://libguides.uta.edu/pols2311fm> . If you have any questions, please feel free to contact Suzanne Beckett, at sbeckett@uta.edu or at 817.272.0923.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabi. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. Classes are held as scheduled during this week and lectures and presentations may be given.

Student Feedback Survey: At the end of each term, students enrolled shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located out the doors to the left or right. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

Bomb Threats: If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

After Hours Safety Escort:

The Sam Mav Escort service provides a service to assist students, faculty, staff and campus visitors to reach their destinations after regular business hours. The hours of service are 7:00 p.m. to 1:00 a.m., Sunday through Saturday. 817-272-3381

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911.

Notes for Success in Biology 1345

1. Attend *every* lecture. It is highly unlikely you will succeed in this course if you do not attend lecture. The topics covered in this course build on each other; missing class will quickly put you behind.
2. Prior to class, read the chapter that will be covered in lecture.
3. Review your lecture notes after each class. Note topics that require further study or clarification.
4. Work the problems in the back of the chapter in addition to the homework problems.
5. Spend the necessary amount of time studying. The rule of thumb for succeeding in Biology is three hours of study for every hour of lecture. This means that at a minimum you should plan to study nine hours each week, outside of lecture and lab.
6. Don't procrastinate. These concepts take time to sink in and apply.
7. Check Blackboard and your UTA email on a regular basis.
8. Get organized. Put important dates in your planner today and make a study plan.

This information is going to come at you fast in more detail than you are accustomed to. These are major differences between high school and college. If you do not study and prepare independently, you will fall behind quickly.

This course outline is tentative and subject to change

Class Schedule* (dates are subject to change)

Week	Date	Topic
1	15-Jan	Syllabus
	17-Jan	What is biology/science
2	21-Jan	MLK Holiday
	22-Jan	atoms and compounds
	24-Jan	water and carbon
3	29-Jan	Biological macromolecules
	30 Jan (wed)	CENSUS DATE
	31-Jan	Wrap Up and Review
4	5-Feb	Mid-term I
	7-Feb	DNA Structure and Function
5	12-Feb	Genes and Proteins
	14-Feb	Cell Reproduction
6	19-Feb	Meiosis and Sexual Reproduction
	21-Feb	Wrap Up and Review
7	26-Feb	Mid-term II
	28-Feb	Mendel's Experiments and Heredity
8	5-Mar	Mendel (probability).
	7-Mar	Modern Understanding of Inheritance
9	12-Mar	SPRING BREAK
	14-Mar	SPRING BREAK
10	19-Mar	Wrap Up and Review
	21-Mar	Mid-term III
11	26-Mar	The Cell and its components
	28-Mar	Cell and cell components, Plasma Membranes
	29 Mar (Fri)	LAST DAY to DROP
12	2-Apr	Plasma membranes
	4-Apr	Wrap Up and Review
13	9-Apr	Midterm IV
	11-Apr	Metabolism
14	16-Apr	Cellular Respiration
	18-Apr	Photosynthesis
15	23-Apr	Wrap Up and Review
	25-Apr	Mid-term V
16	30-Apr	
	2-May	
17	06-11 May	Finals