

BIOL 2401 Anatomy and Physiology.

Course Syllabus: Fall 2025



"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

Instructor: ELENA BIRDSONG

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	8:00-9:30 am	8:00-9:30 am 1:00 – 3:00 pm	8:00-9:30 am	8:00-9:30 am 1:00 – 3:00 pm	By Appointment	via NTCC email.

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description (including prerequisites):

4 credit hours.

Anatomy and Physiology is the first part of the two-course sequence is a study of the structure and function of the human body including cells, tissues and organs of the following systems, integumentary, skeletal, muscular, nervous, and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides hands on learning experience for exploration of human system components and basis physiology. Animal dissection is a required component of laboratory activity. Successful completion of BIO 2401 with C or better grade allows the student to continue on to BIOL 2402.

College Student Learning Outcomes:

1. Critical Thinking Skills

CT.1 Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.

2. Communication Skills

CS.1 Students will effectively develop, interpret and express ideas through written communication.

3. Empirical and Quantitative Skills

EQS.1 Students will manipulate numerical data or observable facts by organizing and converting relevant information into mathematical or empirical form.

EQS.2 Students will analyze numerical data or observable facts by processing information with correct calculations, explicit notations, and appropriate technology.

4. Team Work

TW2. Students will work with others to support and accomplish a shared goal.

Student Learning Outcomes:

1. Use anatomical terminology to identify and describe locations of major organs of each system covered.
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
3. Describe the interdependency and interactions of the systems.
4. Explain contributions of organs and systems to the maintenance of homeostasis.
5. Identify causes and effects of homeostatic imbalances.
6. Describe modern technology and tools used to study anatomy and physiology.
7. Apply appropriate safety and ethical standards.
8. Locate and identify anatomical structures.
9. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware,
10. Work collaboratively to perform experiments.
11. Demonstrate the steps involved in the scientific method.
12. Communicate results of scientific investigations, analyze data and formulate conclusions.
13. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

Evaluation/Grading Policy:

Lecture Average 75% of final course grade

4 Unit Exams

40% of the lecture grade

1 comprehensive final Exam+ SLOs

20% of the lecture grade

Learn Smart &Homework

14% of the lecture grade.

Attendance

1% of the lecture grade.

Lab Average 25% of final course grade

Lab Reports + Quizes 5%

Lab Practicals 20%

Lab Practical Exam will be Filling in the blank.

Required Textbook:

Inclusive Access for Lecture Material: We have negotiated with the Publisher to obtain a discounted price for your lecture course materials. Your eBook and Connect Access Code are included with your tuition and will be available through Blackboard on the first day of class (use the link found on the Bb course homepage). The materials are required for your class and essential in your success. If you also determine that you would like a print copy of your text in addition to your inclusive access loose-leaf copies will be available in the College Store at a discounted price. You may opt out of purchasing your materials from the College Store through the Census Date for the course. If you choose to opt out you will be responsible for purchasing your Connect Access Code from another vendor. You will receive a refund for the Inclusive Access if you opt out.

Lecture Material: Hole's Human Anatomy & Physiology. Autor: Charles J. Welsh & Cynthia Prentice-Craver. ISBN 9781260265224. Edition 16.

* Scantrons and maybe Bluebook will be necessary for your Exams.

Lab Book: Laboratory Manual for Human Anatomy & Physiology, 5th Edition, Terry Martin, McGraw-Hill

Publishers ISBN 9781260159363 Copyright 19

Lab Manuals cannot be rented from a third party. Each student must have a lab manual that can be written in and submitted for grading. No photocopies are allowed according to copy right laws.

Lectures & Discussions:

Week1: Introduction to A&P I.

Week2: ch 1: Sciences of Anatomy and Physiology. ch 3: Biology of the cell.

Week3: ch 3: Biology of the cell.

Week4: ch 5: Tissue Organization

Week5: ch 6: Integumentary system

Week6: ch 7: Skeletal system: Bone structure & function,

Week7: ch 8: Skeletal system: Axial & Appendicular skeleton.

Week8: ch 9: Skeletal system: Articulations.

Week9: ch 10: Muscle tissue.

Week10 ch11: Muscular system: Axial & Appendicular muscles.

Week11ch 11: Muscular system: Axial& Appendicular muscles.

Week12ch 12: Nervous system: nervous tissue.

Week13 ch13: Nervous system: brain & cranial nerves,

Week14 ch14: Spinal cord. ,ch 15: autonomic nervous system

Week15:ch16: Senses.

Schedule is approximate and may be changed as needed.

Lecture-associated Make-up Work:

Make-up Exams: It is the student's responsibility to get in touch with the instructor immediately upon his/her return if an exam is missed. If a makeup exam can be given, there will be no bonus points added.

A failing course grade will result if the comprehensive final exam (#5) is missed or if two or more exams are missed. Changes to this policy are solely up to the discretion of the instructor. On occasion assignments may be given in class.

There is no makeup for daily work. All assignments are due at the beginning of the period and must be turned in in person. Lecture assignments will be accepted only on the due date.

Course grades will be determined as follows:

90.0 --- 100 = A 60.0 --- 69.9 = D

80.0 --- 89.9 = B 59.9 and < = F

70.0---79.9=C

Please note:

Due to FERPA, student privacy regulations, you will need to provide a written note listing anyone who will be allowed to pick up your work or to whom I will be able to speak about your grade or attendance.

Attendance Policy:

*Regular and punctual attendance is expected to receive a final grade.

Attendance will be taken.

Lecture, Lab and Connect Schedules:

These are posted on Blackboard. It is your responsibility to contact Connect and get any problem resolved.

All schedules for this semester are approximate and may be changed as needed.

For emergency reminders, such as a canceled class, I will make an announcement on Blackboard and/or send an email.

For connect assignment and quiz, don't wait until the last day or two to complete it.

Student Responsibilities/Expectations:

- **Please turn cell phones OFF DURING CLASS so you can devote your time to your studies.**
- Failure to abide by this classroom policy may result in your dismissal from class and will be reflected in your course grade.
- Students may be asked to turn in cell phones when an exam is given and/also when it is reviewed.

Communications:

If you need to get in touch with me outside of office hours, please email me at ebirdsong@ntcc.edu
I will get back in touch with you within 24 hours. For faster and emergency communications we could use Microsoft Teams.

Institutional/Course Policy:

Failure to take the proctored an exam or proctored final exam will result in a grade of "F" for the course. The last day to drop with a "W" is **Nov 18**. If circumstances require you to withdraw from this course, you must do so by that date. It is the **student's responsibility** to initiate the withdrawal with the registrar's office. **Failure to officially withdraw will result in your receiving a grade of F.**

Alternate Operations During Campus Closure and/or Alternate Course delivery Requirements.

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:

Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Generative AI is a subset of AI that utilizes machine learning models to create new, original content, such as images, text, or music, based on patterns and structures learned from existing data (Cornell, Center for Teaching Innovation). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt. Individual course instructors may set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification. **(Adapted from the Stanford University Office of Community Standards-- accessed August 31, 2023)**

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.