



BIOL 2401.021HY – A&P I (Online Lecture; Face-to-Face Labs)

Course Syllabus: Fall 2024

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

Professor: Chris T. McAllister (Dr. Mac) Univ. North Texas, Ph.D.

Postdoctoral Fellow in Internal Medicine (VA Med. Cntr, Dallas)

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Class meets: Sun-Sat online

Lab meets: face-to-face M-W 9:30am-10:50pm (room UHS 157)

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday
	8:30-9:30am; 1:30-2:30pm	8:30-10:30am; 1:30-2:30pm	8:30-9:30am	8:30-10:30am	None

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Disclaimer: The instructor reserves the right to alter this syllabus as necessary with full disclosure to the student. This syllabus and schedule is articulated as an expectation of class topics, learning activities, and expected student learning. However, the instructor reserves the right to make changes in this schedule at any time that, within his professional judgment, would result in enhanced or more effective learning on the part of the students. These modifications will not substantially change the intent or objectives of this course and will be done within the policies and procedures of NTCC. *This may include the test schedule or topics of discussion in either lecture or laboratory. Should that happen, the student will be notified.*

Catalog Course Description (include 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. This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab activities reinforce these topics.

Note: Additional course fee(s) required.

Prerequisite(s): None

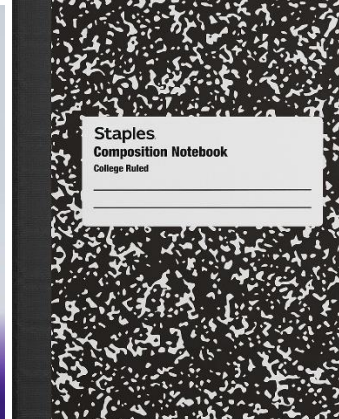
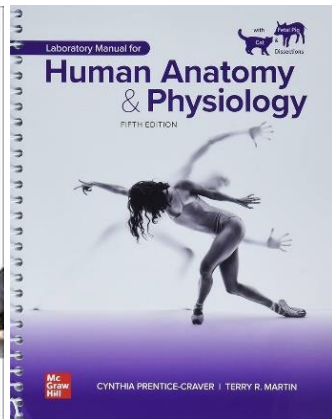
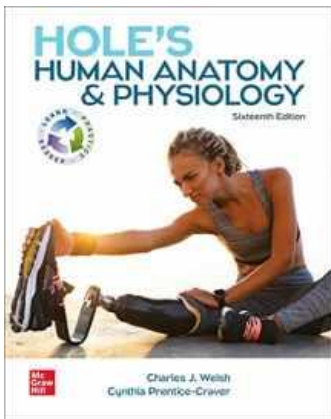
Required Instructional Materials: Required Textbook: Inclusive Access for Lecture Material: We have negotiated with the Publisher to obtain a discounted price for your lecture course materials. Your eBook and

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*. Authors: Charles J. Welsh & Cynthia Prentice-Craver. 16th ed, 2022. ISBN 978-1-260-265220-4 (bound edition). ISBN 978-1264-26288-5 (loose-leaf)

* Scantrons will be necessary for all of your Exams. Get in the bookstore.

About the text: *Perfect for introductory level students, Hole's Human Anatomy and Physiology is crafted to be easily understood, even for those without a science background. The book prioritizes building a solid foundation by exploring essential themes distilled into fundamental concepts and highlighting underlying mechanisms. The content is presented in an easy to digest writing style, complemented by striking artwork and illustrations. Throughout the text, the Learn, Practice, Assess method is consistently applied, seamlessly integrating assessment and practice opportunities. This approach assists students in honing their understanding and concentrating their study efforts. The author team, actively engaged in the classroom, brings a blend of career relevance, an emphasis on clinical applications, concise language, and a contemporary perspective to this esteemed anatomy and physiology classic.*



Required Lab Instructional Materials: *Laboratory Manual for Human Anatomy & Physiology*, 5th Edition, Authors: Cynthia Prentice-Craver and Terry Martin, McGraw-Hill Publishers ISBN 978-1-260-26520-0 (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 copyright laws).

Required Lab Notebook (Journal): (a bound composition notebook. NTCC bookstore or WallyWorld.

Minimum Technology Requirements: Internet Access; Microsoft Office or Google Suite

Required Computer Literacy Skills: Blackboard Ultra; Microsoft Office or Google Suite

Optional Instructional Materials: none

Student Learning Outcomes (SLO's):

BIOL 2401 Anatomy and Physiology I SLOs	Assessment Tool(s)
1. Use anatomical terminology to identify and describe locations of major organs of each system covered.	Average: Integumentary Quiz Questions 1 – 5, Skeletal Quiz Questions 1-7, Muscular Quiz Questions 1 – 5, Nervous Quiz Questions 1 – 5, Special Senses Quiz Questions 1 – 5
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.	Average: Integumentary Quiz Questions 6 – 10, Skeletal Quiz Questions 8 – 11, Muscular Quiz Questions 6 – 10, and Nervous Quiz Questions 6 – 9, Special Senses Quiz Questions 6 – 10
3. Describe the interdependency and interactions of the systems.	Average: Integumentary Quiz Questions 11 – 15, Skeletal Quiz Questions 12 – 16, Muscular Quiz Questions 11 – 16, Nervous Quiz Questions 10 – 14, Special Senses Quiz Questions 11 - 15
4. Explain contributions of organs and systems to the maintenance of homeostasis.	Average: Integumentary Quiz Questions 16 – 20, Skeletal Quiz Questions 17 – 20, Muscular Quiz Questions 17 – 21, Nervous Quiz Questions 15 – 19, Special Senses Quiz Questions 16 - 20
5. Identify causes and effects of homeostatic imbalances.	Average: Integumentary Quiz Questions 21 – 25, Skeletal Quiz Questions 21 – 25, Muscular Quiz Questions 22 – 26, and Nervous Quiz Questions 20 – 24, Special Senses Quiz Questions 21 - 25
6. Describe modern technology and tools used to study anatomy and physiology.	Non-System SLO Assessment Quiz Questions 1 - 3
7. Apply appropriate safety and ethical standards.	Non-System SLO Assessment Quiz Questions 4 - 12
8. Locate and identify anatomical structures.	Average: Integumentary Quiz Questions 26 - 35, Skeletal Quiz Questions 26 – 40, Muscular Quiz Questions 27 – 41, Nervous Quiz Questions 25 - 39
9. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.	Non-System SLO Assessment Quiz Questions 13 - 26
10. Work collaboratively to perform experiments.	Lab Average
11. Demonstrate the steps involved in the scientific method.	Non-System SLO Assessment Quiz Questions 27 - 36
12. Communicate results of scientific investigations, analyze data and formulate conclusions.	Lab Average
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.	Non-System SLO Assessment Quiz Questions 37 - 41

Evaluation/Grading Policy: (Final Letter Grade Dependent on final %)

Evaluation/Grading Policy:

LECTURE: (50%)

Connect Online (10%)

Optional Report (5%)

4 Lecture Exams and Final (30%)

SLO's (5%)

LABORATORY: (50%)

Lab Journal (15%)

Weekly lab quizzes (5%)

2 Lab Practicals (30%)

*Letter Grade Assignment:

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = <59%

***Final Grade will be rounded up if attendance, punctuality, and feedback/discussions were made.**

Connect Online Assignments:

Connect Online Assignments: Each chapter has an assigned Smartbook activity and chapter assignment to check your understanding of chapter topics and reading assignments. These are completed online in Connect which is accessed through blackboard. You will need to login to blackboard on the 1st day of the semester. Activities and Assignments are not timed. *Students will work at their own pace prior to the final due date so don't get behind or wait until the last day to complete them.* **This final due date is firm – no makeups for missed online Connect work will be allowed.**

Lecture Material:

Each week, lectures will be posted on Bb from Powerpoint (Pp) presentations by your professor. Either print these out or have them available on your laptop during class. Study them for major lecture exams!

Regular Lecture Tests/Exams (4):

The lecture exams may include both objective questions (multiple choice, matching, etc.) over text materials, and readings as well as descriptive questions requiring detailed explanations over broad themes. Success on the exams is a function of anxiety regulation, test prep, study strategies, and studying for retention. Retention requires repetitions, which requires time! The 4 unit exams will be completed **online via Connect monitored by Respondus Lockdown Browser**. Each exam is 100 questions worth 100 points. **Tests cannot be made up for any reason without prior communication to your instructor on extreme situations.** Any missed exam will be recorded as a zero (0) and can only be made up with the comprehensive final exam grade counting twice at the end of the semester to replace the zero. The final exam is worth 100pts (see below). A review will be provided for each.

Final Lecture Exam:

A 100 point final exam will be given during the time set forth by the college Final Exam Schedule. It will be completed **online via Connect monitored by Respondus Lockdown Browser**. The final exam will consist of 100 objective questions (multiple choice, matching, etc.) from chapters chosen by your professor TBA. **No makeup on the final exam!**

Note: ***If you miss a single lecture exam for any reason, you will receive a zero. You can then remove that zero by taking a comprehensive final exam that will be worth 200 pts. I will then replace your zero with what you make on the final and then record the final score too.***

Weekly Lab Quizzes:

Each week you will take a lab quiz worth 10 pts (with 2 bonus pts on fill-in-the-blank questions) on lab material covered the prior lab period. Every other quiz is entirely bonus, that is, every odd numbered quiz will be worth 12 pts total. Every even numbered quiz counts for a grade against 10 possible pts. You must be in your seat once the quiz begins to take it. If you are late for any reason, you cannot take the exam. Just be punctual to class as this is an excellent way to get bonus points on quizzes done well and helps prepare you for lab practical exams. Quizzes cannot be made up. A scantron is needed for each quiz.

Lab Reports:

The lab reports from the lab manual are to be completed before or **during lab**. I do not take up and grade these reports as these are designed to help you prepare for the Lab Practicals. I will be glad to take a look at your answers and provide feedback/discussion.

Lab Practicals:

Four lab practicals will be given during the semester. Each is a live exam with stations that students will rotate through and answer fill-in-the-blank questions associated with visuals from lab exercises and handouts from the professor. Visuals may include images, slides, specimens, lab equipment, data tables, graphs, experimental results, etc. A review and word bank will be provided for each.

Lab Journal:

It is a requirement of this course to keep a Non-majors Biology Laboratory Notebook. The notebook will be graded by Dr. Mac at 2 different (announced) times during the semester. First grading is worth 50 pts and the final grading is worth 100 pts. The notebook should be a **bound** composition notebook (minimum of 50 sheets with 5 x 5 quads), available at most bookstores or Walmart. It is worth a total of 150 pts. More later on this journal.

Optional Class Report:

You will provide an optional special written report in this class on topics provided by the instructor. First come, first serve. This is entirely optional! More later...

Cell Phones and Unapproved Electronic Devices: Absolutely NO video cameras, tape recorders, beepers, MP3 players, I-pods, or other unapproved electronic devices are to be used during lab. You may use your laptop. You may also turn your cell phone to a silent buzz (but not during any exam) and excuse yourself from the classroom/lab if you absolutely must answer the call_(emergencies only!). Examples would include sick children and/or seniors or other family members who need your immediate help. It is wise to leave your phone in your car on test days!! Students found using their cell phones (other than for photos or looking up info) or other devices during lab will **lose 10 pts** from their total class score for each offense. **THIS INCLUDES TEXTING!!** *Please make it a habit to turn cell phones OFF or on vibrate before lab begins each day. Phones are never to be on during any sort of examination. If your phone rings during any exam, you must immediately turn in your exam and receive the grade you earned on all questions whether or not you completed that exam (probably an "F"). No one to blame but yourself!*

Minimum Technology Requirements:

- Internet capable desktop, laptop, or chromebook (Tablets/ipads/Phones not recommended)
- Microsoft Office for Lab Workbook in Microsoft Word
- Video conferencing capability with webcam and microphone using Zoom

- Access to printer if hard copies of assignments are desired

Required Computer Literacy Skills: Blackboard; Microsoft Office; Zoom

- Web browsing skills for working with the online homework system
- Ability to use Blackboard for access to course information and assignments
- Functional use of Microsoft Office and ability to insert images into word docs
- Ability to use camera and microphone for video and sound in zoom
- Competent and professional emailing skills
 - Emails should have the following format in subject line: Last Name, First Name -Course ID
 - Example: McAllister, Chris - BIOL 2401

Student Expectations:

- Attend each LAB and be punctual; log into course via computer each week (3 times is recommended)
- Adhere to Lab Etiquette including Teams Virtual Classroom if needed
- Show respect to classmates and your instructor (agree to disagree)
- Adhere to in class lab Exam Etiquette as well as online Respondus Lockdown Browser lecture exams
 - Testing Violations will be reported to the Department Chair

Communications: NTCC email is the official form of communication used by the college. The professor will try to respond to student emails within 24 hrs of receipt (except on weekends). **You should NOT expect an immediate response from your instructor in reply to your email.** While I will try to respond in a timely fashion, I do not always have my phone on my person, and I do not have notifications set on my phone to alert me the moment an email arrives in my inbox. (On the weekends it may be up to 48 hrs after receipt of email). Feedback and grades on assignments and postings will be posted 48 to 72 hrs after due date/time of assignment.

Institutional/Course Policy: Withdrawal Date

The last day to withdraw from the course and receive a W is **Tuesday, November 19**. Discontinuing with the course without officially dropping the course by this date will result in a grade earned, in most instances an “F”. A stoppage in attendance does not equate to dropping the course and I will not drop you from the course if you quit attending. It is entirely your responsibility.

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)**

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.

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.

Eagle ASSIST:

At Northeast Texas Community College, we understand that students often need support that extends beyond the classroom. "Eagle Assist" is the place to start when looking for that type of assistance. Our support system is here to help you succeed in both your academic and personal growth.

Services provided at <https://www.ntcc.edu/student-services/eagle-assist>

- [Mental Health Counseling](#) (visit www.thevirtualcaregroup.com/ntcc to activate your account)
- [Classroom Accommodations](#)
- [NTCC Care Center Food Pantry](#)
- [NTCC Care Center Hygiene Closet](#)
- [NTCC Care Center Cook Nook](#)

- [Financial Literacy](#)
- [Child Care Assistance](#)
- [Emergency Aid](#)

Send us a message at eagleassist@ntcc.edu

*Dual credit students please email jstewart@ntcc.edu if interested.

BIOL. 2401.021 HY COURSE SCHEDULE

All 4 credit college courses require 9 hours of lecture work per week and 3 hours of lab course work per week. You may always work ahead but never get behind.

Tentative Course Timeline:

(*note* instructor reserves the right to make adjustments to this timeline and lectures/labs at any point in the term):

<u>BIOL 2401</u>	<u>Lectures (Sun-Sat)</u> <u>Text Chapters & Pp</u> <u>(online)</u>	<u>Lab Exercises (M-W) @9:30am-</u> <u>11:50am</u> <u>Lab manual and Dr. Mac</u> <u>handouts (on campus in lab)</u>
Week 1: Aug. 26, 28	Read Syllabus (Mon. Aug. 26) CH 1: History of Anatomy CH 1: Intro to Anatomy	Monday, Aug. 26 Syllabus; The Lab Notebook; Lab 1 (Metric System); Wed., Aug. 28 Lab 2: Body Organization
Week 2: Sept 2, 4	Labor Day Holiday (Mon. Sept. 2)-No lecture! CH 1 (con't)	Labor Day Holiday (Mon. Sept. 2)-No lab! Lab 4: (Wed., Sept. 4) Care & Use of the Microscope
Week 3: Sept. 9, 11	CH 3: The Cell	Lab 5: (Mon, Sept 9) Cell Structure and Function Lab 7: (Wed., Sept. 11) Cell Cycle
Week 4: Sept. 16, 18	CH 5: Tissues	Lab 8: (Mon. Sept. 16) Epithelial Tissues Labs 9-10: (Wed. Sept. 18) Connective, Muscular, & Nervous Tissues
Week 5: Sept. 23, 25	EXAM 1 (Thurs-Sun, Sept. 26-29) CH 7: Skeletal	Lab 11: (Mon. Sept. 23) Integument Lab Practical #1 (Wed. Sept. 25)
Week 6: Sept. 30, Oct. 2	CH 7: Skeletal (con't)	Labs 12-13: (Mon. Sept. 30) Skeletal, Parts I & II Lab 14: (Wed. Oct. 2) Skull

Week 7: Oct. 7, 9	CH 7: Skeletal (con't)	Labs 15-16: (Mon. Oct. 7) Vertebrae & Thoracic cage Lab 17: (Wed. Oct. 9) Pelvic Girdle & Lower Limbs
Week 8: Oct. 14, 16	CH 8: Articulations	Lab 19: (Mon. Oct. 14) Joints Lab Practical #2 (Wed. Oct. 16)
Week 9: Oct. 21, 23	EXAM #2 (Oct. 24-27) CH 9: Muscles	Labs 20, 22: (Mon. Oct. 21) Muscular Lab 23: (Wed. Oct. 23) Chest, Shoulder, Upper Limb Muscles
Week 10: Oct. 28, 30	CH 9: Muscles (con't)	Lab 24: (Mon. Oct. 28) Vertebral, Abdominal wall, Pelvic floor muscles Lab 25: (Wed. Oct. 30) Hip and Lower limb muscles
Week 11: Nov. 4, 6	CH 9: Muscles (con't) EXAM #3 (Nov. 7-10)	Review for Lab Practical #3 (Mon. Nov. 4) Lab Practical #3 (Wed. Nov. 6)
Week 12: Nov. 11, 13	CH 10: Nervous Tissue	Labs 27, 30: Nervous Tissue & Nerves; Brain & Cranial nerves (Mon. Nov. 11) Lab 28: Meninges, Spinal Cord (Wed. Nov. 13)
Week 13: Nov. 18, 20	CH 11: Brain & Cranial Nerves	Lab 32: Sheep Brain Dissection (Mon. Nov. 18) Lab 35: Eye Structure, Eye dissection (Wed. Nov. 20)
Week 14: Nov. 25	CH 12: Nervous System-Senses	Lab 36: Visual Test (Mon. Nov. 25) THANKSGIVING HOLIDAY (Wed. Nov. 27-29)-No lab!
Week 15: Dec. 2, 4	CH 12: (con't) EXAM #4: Dec. (Dec. 5-8)	Labs 37-38: Ear & Hearing; Ear & Equilibrium (Dec. 2) Lab Practical #4 (Wed. Dec. 4)
Week 16: Dec 9-12	FINAL EXAM (TBA)	Labs are DONE!!!!!!!!!!!!

DISCLAIMER NOTE: The instructor reserves the right to alter this syllabus as necessary with full disclosure & prior notice to the student.

*Various assignments on specific dates beyond exams will be given throughout the semester and posted online on Bb.

**Major exam dates are tentative and subject to change, if necessary.

***Modifications of the above schedule may be made and the material covered on any exam, including dates for major examinations.

Notes: