

# BIOL 2402 Anatomy and Physiology.

Course Syllabus: Spring 2021



*"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– 9:00 am	8.00-9:00 am 1.00-3.00 pm	8:00– 9:00 am	8.00-9:00 am 1.00-3.00 pm		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 (include prerequisites):**

4 credit hours.

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics).

**Prerequisite:** BIOL 2401 (Anatomy and Physiology I).

## **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. Explain the nature of the Endocrine system.
2. Describe the characteristics and functions of Blood.
3. Discuss the major structures and functions of the organs of the cardiovascular system.
4. Describe the major structures and general functions of the lymphatic system and immunity.
5. Name the mayor organs of the digestive system and describe the general functions.
6. Name the major organs of the respiratory system and describe the general functions.
7. Discuss the major structures and functions of the urinary system including water and electrolyte balance.
8. Describe the major structures and functions of the male and female reproductive system.
9. Explain interrelationships among molecular, cellular, tissue, and organ function in each system and the interdependency of the system.
10. Explain contributions of organ systems to the maintenance of homeostasis and the causes of effects of homeostatic imbalances.
11. Communicate results of scientific investigations, analyze data and formulate conclusions using critical thinking and scientific problem-solving skills.

## Evaluation/Grading Policy:

**Lecture Average 75% of final course grade**

**4 Unit Exams**

**40% of the lecture grade**

**1 comprehensive final Exam**

**20% of the lecture grade**

**Homework & Quiz**

**14% of the lecture grade.**

**Attendance**

**1% of the lecture grade**

**Lab Average 25% of final course grade**

**Lab Reports 5%**

**Lab Practical 20%**

## 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 class day (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. Visit [www.ntccbookstore.com](http://www.ntccbookstore.com). 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: Inclusive Access: Hole's Human Anatomy & Physiology with Connect Plus/LearnSmart.** Shier McGraw Hill Copyright 19 Edition 16 ISBN 978-1-266310515.

**\*Recommended Reading:** Chapter 13 through 24 in the textbook.

**Lab Book:** Laboratory Manual for Human Anatomy & Physiology, 4<sup>th</sup> Edition, Terry Martin, McGraw-Hill Publishers ISBN 9781260159363 Copyright 19.Pig Edition

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:**

- Week 1-Introduction to A&P II
- Week 2- Endocrine System
- Week 3- Digestive System
- Week 4- Blood
- Week 5- Blood and Cardiovascular System
- Week 6- Cardiovascular System
- Week 7- Lymphatic System and Immunity
- Week 8- Respiratory System
- Week 9- Urinary System
- Week 10- Urinary System
- Week 11- Water, pH, and Electrolyte Balance
- Week 12- Reproductive System
- Week 13- Reproductive System
- Week 14- Pregnancy and Development
- Week 15- Genetics

### **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 Lab assignments are due at the **beginning** of the period, and must be turned in before the next class start. 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.

### **Lecture and Connect Schedules:**

These are posted on Blackboard.

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. **Make sure that you activate and check your NTCC email regularly.**

**Connect assignment and quiz:** 14% of final course grade.

- **LearnSmart assignments** are beneficial to your understanding of the material. These are not figured into your course grade; however, students said that doing the LearnSmart exercises improved their grades.
- This guided reading helps identify areas that you are having trouble understanding. These should take an average of 35-50 minutes.

**Homework assignments** are required and figured into the course grade.

- These can be done 2 times before the due date. 5% will be deducted for the 2<sup>nd</sup> try
- There is no time limit, so it is advisable to start early and work on this during the week.
- Use of the eBook and hints are available with no deductions.
- Feedback will be shown after submitting each attempt. After the first attempt, you will see what questions you got correct or incorrect. After the 2<sup>nd</sup> attempt, a more detailed feedback is given. Printing is allowed

**Quizzes** have a time limit of 30 minutes. Usually 20 – 25 questions are pulled from a pool of questions. You may see new questions each time. Quizzes are good to do multiple times after the due date to help review for the exams, since you may see new questions each time

**-What are Study Attempts?** Study attempts allow students to retake and review the material, as well as get feedback, as many times as desired without the attempt affecting the grade. These are not available until after the due date. This is especially beneficial for quizzes because in many cases, a set number of questions are pulled from a larger pool of questions. New questions may be displayed each time the study attempt is taken. However, this option prevents the ability to give an extension if the due date is missed. If the due date is missed for any reason for a homework or quiz assignment, a zero will be given. There is no reason to ask for an extension.

**-For both Connect Homework and Connect Quizzes**, don't wait until the last day or two to complete the assignment. If you have Connect problems, that will NOT be a reason to be late. It is your responsibility to contact Connect and get any problems resolved. However, before you get in touch with Connect, send me an email telling me your problem. This way I can check to make sure that everything is set correctly on my end. Since it may take me 24 hours to get back with you, this is even more reason not to wait until the last minute.

The two lowest assignment grades are dropped. The grade is continuously recalculated every time a grade is entered so that the grade you are seeing is current.

- **Exams and Lab Practical:** There is ONE TEST for each of the four units for the Lecture and Laboratory that we are covering. Read the information in the "Start Here" folder to familiarize yourself with the process for downloading Proctorio Monitor Lockdown Browser for your Exams and Lab Practical in case we need to use it. Exams

And Lab Practical will be in the classroom.

- The “Lab” component of this course:** will consist of laboratory activities through your Terry Martin Lab Manual Book for A&P I, and other assignments you will find in your respective Unit section in your Blackboard page.
- Check in Blackboard your Lab schedule for each week.
- Lab Manual Reports from your Terry Martin Lab book is graded based on documented evidence of completion of the lab exercise and successful answering of questions presented.
- Short answer questions are expected to be answered in complete sentences in your own words.
- All assignments including lab reports need to be submitted on the due date by the time specified. The Lab assignment will be due before the next lab class start. There is no reason to submit a lab assignment late. A zero may be given for any lab assignment that is received late.
- Labs will generally be graded within 1-2 weeks of submission.
- One lab assignment grade will be dropped. The grade is continuously recalculated every time a grade is entered so that the grade you are seeing is the grade with the lowest grades dropped.
- Each Course Unit has activities or Lab questions. You will not submit a written report for grading. Instead, please use this to study and be prepared for your Lab Practical.

### **Student Responsibilities/Expectations:**

- Attendance is expected and will be graded.
- Our schedule will be the same day and time you signed during your registration.
- Read very carefully your Blackboard Academic information and follow the instructions provided.
- Computer and internet are necessary for this course.
- Use all the resources I posted in Blackboard in order to succeed in this course.
- Communicate with me if you have any problem.
- Be Kind to yourself and others.

### **Attendance Policy:**

- \* Regular and punctual attendance through Iclicker cloud is expected to receive a final grade. Attendance will be taken when you sign or answer a question in Iclicker.

### **Communications:**

If you need to get in touch with me, please email me at [.ebirdsong@ntcc.edu](mailto:ebirdsong@ntcc.edu). I will get back in touch with you within 24 hours. Remind app will be used for faster communications for emergencies.

### **Institutional/Course Policy:**

Failure to take the proctored final exam will result in a grade of “F” for the course. The last day to drop with a “W” is **APRIL 7**. 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.

**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 Shannin Garrett, Academic Advisor/Coordinator of Special Populations located in the College Connection. She can be reached at 903-434-8218. For more information and to obtain a copy of the Request for Accommodations, please refer to the [NTCC website - Special Populations](#).

**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.