# **BIOL 2402** Anatomy and Physiology.

**Course Syllabus: Spring 2020** 



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

**Instructor: ELENA BIRDSONG** 

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Office	Mor	nday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	8:30-9.3	30 am	8.30-9:30 am	8:30-9:30 am	8.30-9:30 am	Ву	via
	1:30 – 4	1:30 pm		1:30-4:30 pm		Appointment	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) with a grade of C or higher.

#### **College Student Learning Outcomes:**

- 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.

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# **Evaluation/Grading Policy:**

Lecture Average 75% of final course grade
4 Unit Exams
1 comprehensive final Exam
Learn Smart &Homework

40% of the lecture grade
20% of the lecture grade
15% of the lecture grade.

Lab Average 25% of final course grade
Lab Reports 5%
Lab Practical 20%

Animal dissection is a required element of the laboratory component

## **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. 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: Anatomy and Physiology: An Integrated Approach: Mckinley, et. al.

ISBN 9781260572148 Copyright 18 Edition 3

<u>Lab Book:</u> Laboratory Manual for Human Anatomy & Physiology, 4<sup>th</sup> 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:**

- 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 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:

**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, Lab 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.

#### **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 <a href="mailto:ebirdsong@ntcc.edu">ebirdsong@ntcc.edu</a> I will get back in touch with you within 24 hours.

## **Institutional/Course Policy:**

Failure to take the proctored midterm exam or proctored final exam will result in a grade of "F" for the course. The last day to drop with a "W" is **April 9**. 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 Kat Belew, 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 <a href="NTCC website - Special Populations">NTCC website - Special Populations</a>.

## 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