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| |  | | --- | | NORTH CENTRAL TEXAS COLLEGE  COURSE SYLLABUS | |

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| *Course Title:* | BIOL 2401 Human Anatomy & Physiology I | | | | | |
| *Course Prefix & Number:* | | BIOL  2401 | *Section Number:* | 342,345, 348,403 | *Semester/Year:* | Fall  2020 |
| *Semester Credit Hours:* | | 4 | *Lecture Hours:* | 3 | *Lab Hours:* | 1 |
| *Course Description (NCTC Catalog):*  Anatomy and Physiology I is the first part of a two-course sequence. It 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.  \*Note: This course is fully online with pre-recorded lectures. | | | | | | |
| *Course Prerequisite(s):* | | | | | | |
| *Required or Recommended Course Materials:*  **Lecture Book:**  *OpenStax: Human Anatomy and Physiology. This textbook is free and available online.*  Anatomy and Physiology, 1st edition, 1st edition (Jan. 1, 2013, updated Jan. 16, 2020), OpenStax College. ISBN-13: 978-1938168130  \*\*This is a FREE download with options to order print copies. Go to: <https://openstax.org/details/anatomy-and-physiology> , select how you want to access the book.  *If you would like to have another textbook for this class, the text sold in the bookstore is fine.*  *Fundamentals of Anatomy and Physiology*, 11th ed., Martini. ISBN 9780134396026  **Lab Book:**  I will provide supplemental lab handouts during class. Another NCTC Lab manual for Human Anatomy and Physiology will be available free online in the Introduction Module when class starts.  Recommended Book to Help with Lab:  Anatomy Coloring Book, 7th edition, Kaplan. ISBN-13: 978-1506250274 | | | | | | |

**INSTRUCTOR INFORMATION**

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| *Name of Instructor:* | Amy Hoffman, M.S. |
| *Campus/Office Location:* | I will be online **Monday through Thursday from 9am- 11am and 1pm- 3pm**. My goal is to respond to all emails within 24 hours. If you would like a video meeting please make an appointment through Canvas email or CiscoWebex. |
| *Telephone Number:* | 940-668-4290 (fastest contact is via Canvas email) |
| *E-mail Address:* | [ahoffman@nctc.edu](mailto:ahoffman@nctc.edu) |

**STUDENT LEARNING OUTCOMES** (From Academic Course Guide Manual/Workforce Education Course Manual/NCTC Catalog

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| *At the successful completion of this course the student will be able to:* | |
|  | **Lecture 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.   **Lab Learning Outcomes**  Upon successful completion of this course, students will:   1. Apply appropriate safety and ethical standards. 2. Locate and identify anatomical structures. 3. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations. 4. Work collaboratively to perform experiments. 5. Demonstrate the steps involved in the scientific method. 6. Communicate results of scientific investigations, analyze data and formulate conclusions. 7. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions. |

**TENTATIVE COURSE SCHEDULE ON LAST PAGE OF SYLLABUS**

**GRADING CRITERIA**

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| *# of Graded Course Elements* | *Graded Course Elements* | *Percentage or Point Values* |
| 3 | Lecture Homework Assignments | 10% |
| 14 | Lecture Discussions/ Group Work/ Quizzes  (drop lowest 2+) | 12% |
| 3 | Lecture Exams  (12% each, multiple choice) | 36% |
| 1 | \*\*Optional Comprehensive Final Exam  (multiple choice) | \*\*12% |
| 14 | Laboratory Quizzes/ Assignments (drop lowest 2+) | 12% |
| 3 | Laboratory Practicals  (10% each, fill in the blank) | 30% |
| 1 | \*\*Optional Comprehensive Lab Practical  (fill in the blank) | \*\*10% |
| Total |  | 100% |

**\*\*An optional comprehensive lecture and lab final will be offered as a make-up for missed exams or to replace the lowest exam grade.**

**+If an assignment is REQUIRED it cannot be dropped.**

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| **Grading Scale** |
| **89.5% & up = A**  **79.5-89.4% = B**  **69.5-79.4% = C**  **59.5- 69.4% = D**  **Below 59.5% = F** |

**QUIZ/ EXAM/ PRACTICAL INSTRUCTIONS**

The are several individual assignments for this course, these include: Lab Quizzes, Lab Practicals, Lecture Quizzes, and Lecture Exams. The Google Chrome Browser seems to work best.

***Lab Quizzes***

Lab Quizzes are based on lab handouts. Lab handouts and videos that explain the handouts are posted in Modules. The Handouts are not graded, but highly recommended. If students would like the instructor to check his or her answers on the lab handouts please email answers to the instructor at least 24hrs before the due date of the lab quiz. For extra help, there are Additional Resource pages with links throughout the course and another instructor’s lab manual in the Introduction Module.

Lab Quizzes focus on Anatomy. Students will be shown a picture (and perhaps an arrow on that picture). There are 20 fill in the blank questions. Students will get 2 attempts in taking each Quiz and the highest score will be kept. The time limit is 15 minutes. Lab quizzes are theme based, such as: The Brain or The Spinal Cord. The quiz questions will come from a question bank, so for each attempt students will receive different questions.

***Lab Practicals***

Lab Practicals will focus on Anatomy and questions from Lab Quizzes. Students will be shown a picture (and perhaps an arrow on that picture). There are 35 fill in the blank questions, and spelling counts a fourth of the question (0.75 points). Students will get 2 attempts in taking the Practical and the highest score will be kept. The time limit is 20 minutes. The exam questions will come from a question bank, so for each attempt students will receive different questions. The Practical will be available on the date(s) indicated on the syllabus and grades will be re-weighted after the Practical closes. The Final Practical can replace the student’s lowest Practical grade. If the student receives a lower grade on the Final Practical (compared to his or her other Practical grades) the Final will not hurt their grade.

**\*Canvas will have a difficult time grading fill in the blank answers. Please give the instructor 24hrs to check them and adjust the grade.\***

***Lecture Quizzes***

Lecture Quizzes are based on the provided powerpoints and Video lectures posted in Modules. There will be one Lecture Quiz in the middle of each Unit. There are 20 multiple choice questions. Students will get 2 attempts in taking the Quiz and the highest score will be kept. The time limit is 15 minutes. The quiz questions will come from a question bank, so for each attempt students will receive different questions. The Lecture Exam Review is a great way to study for these quizzes.

***Lecture Exams***

Lecture Exams are based on the provided powerpoints, Video lectures, Lecture Quizzes, Homework, and the Case Studies posted in Modules. The Lecture Exam Review is a great way to study for the Lecture Exams. Each Lecture Exam is 35 multiple choice questions. Students will get 2 attempts in taking the Exam and the highest score will be kept. The time limit is 20 minutes. The exam questions will come from a question bank, so for each attempt students will receive different questions. The Lecture Exam will be available on the date(s) indicated on the syllabus and grades will be re-weighted after the Exam closes. The Final Lecture Exam can replace the student’s lowest Lecture Exam grade. If the student receives a lower grade on the Final Lecture Exam (compared to his or her other Lecture Exam grades) the Final will not hurt their grade.

**PARTICIPATION & HOMEWORK POLICY**

Students are expected to participate by attending lectures and labs, asking questions, commenting (respectfully) on subject matter, engaging in the discussions and taking appropriate notes. Attendance will be taken once a week and is based on the completion of the weekly assignments.

Assignments are due by the stated time on the syllabus, Canvas, and/or the date on the worksheet. **No late assignments will be accepted.** Students are welcome to turn in assignments early.

***Group Work***

Group Work will be submitted individually. Students can work with others if they wish, but each student will need to submit their own answers.

***Homework***

Homework assignments will be individual. Please do not plagiarize or submit another student’s homework assignment.

***Discussions***

There will be at least one graded Discussion for each Unit. Please comment respectfully with other students and write in complete sentences.

**SUBMISSION INSTRUCTIONS**

Due dates are indicated in Canvas, on the provided worksheet and/or on the last pages of the syllabus.

Students are only required to submit the answers to the questions (typed or handwritten). Students can still choose to download the assignment and fill in the blanks around the questions.

Students can submit assignments by clicking on the individual assignment in Canvas and uploading a picture (jpeg) or other attachment (pdf, word doc, pages). Students can also answer the questions in the text box for the assignment on Canvas.

In the event the instructor is unable to open a student’s submission of a Homework, Group Work, and/or special non-quiz Lab assignment the student must resubmit the assignment within 24 hours once the instructor has notified the student via comments on that specific assignment in Canvas. Each student is allowed **one** resubmission of **one** assignment during a semester. There will be 10 points taken off the assignment.

**ATTENDANCE POLICY**

Attendance will be taken once a week and is based on the completion of the weekly assignments. Regular and punctual attendance is expected of all students in all classes for which they have registered. All absences are considered to be unauthorized unless the student is absent due to illness or emergencies as determined by the instructor. It is the student responsibility to provide documentation as to the emergency for approval and judgment by the faculty member. Approved college sponsored activities are the only absences for which a student should not be held liable and only when provided by a college official ahead of the absence. Valid reasons for absence, however, do not relieve the student of the responsibility for making up required work. Students will not be allowed to make up an examination missed due to absence unless they have reasons acceptable to the instructor. A student who is compelled to be absent when a test is given should petition the instructor, in advance if possible, for permission to postpone the exam. Students will be dropped from a class by the Registrar upon recommendation of the instructor who feels the student has been justifiably absent or tardy a sufficient number of times to preclude meeting the course’s objectives. Persistent, unjustified absences from classes or laboratories will be considered sufficient cause for College officials to drop a student from the rolls of the College. From Board Policy FC (LOCAL)

*Absences exceeding 9 contact hours of lecture and or laboratory of BIOL 2401 may result in the student being dropped from the course. It shall be at the discretion of the instructor to drop students who are absent in excess of 9 contact hours.*

Last day to withdraw from a course with a “W” is \_\_\_\_\_ Nov. 2, 2020.

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| If a student cannot complete all the requirements of this course due to illness or some unavoidable conflict, they must request in writing a grade of “I” (incomplete) in order to be allowed to finish the requirements at a later date. When the instructor receives the request, he/she must reply in writing to the request, explaining why the grade of “I” will or will not be assigned. The student needs to be in good standing (passing with an A or B) to apply for an “I”. |

**DISABILITY SERVICES** (Office for Students with Disabilities)

If a student has an Office for Students with Disabilities Form please notify the instructor within the first week of the semester. The Office for Students with Disabilities (OSD) provides support services for students with disabilities, students enrolled in technical areas of study, and students who are classified as special populations (i.e. single parents).

Support services for students with disabilities might include appropriate and reasonable accommodations, or they may be in the form of personal counseling, academic counseling, career counseling, etc. Furthermore, OSD Counselors work with students to encourage self-advocacy and promote empowerment. The Counselors also provides resource information, disability-related information, and adaptive technology for students who qualify.

On the Corinth Campus, go to room 170 or call 940-498-6207. On the Gainesville Campus, go to room 110 or call 940-668-4209.  Students on the Bowie, Graham, Flower Mound, and online campuses should call 940-668-4209.

North Central Texas College is on record as being committed to both the spirit and letter of federal equal opportunity legislation, including the Americans with Disabilities Act (ADA) of 1990, ADA Amendments Act of 2009, and Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112). <http://www.nctc.edu/StudentServices/SupportServices/Disabilityservices.aspx>

**CORE CURRICULUM FOUNDATIONAL COMPONENT AREA** (For classes in the Core)\_\_\_\_\_\_\_\_

 Communication

 Mathematics

X Life and Physical Science

 Language, Philosophy & Culture

 Creative Arts

 American History

 Government/Political Science

 Social and Behavioral Sciences

 Component Area Option

**REQUIRED CORE OBJECTIVES** (For classes in the Core)

X Critical Thinking

X Communication

 Empirical and Quantitative

X Teamwork

X Personal Responsibility

 Social Responsibility

**COURSE TYPE**

 Academic General Education Course (from ACGM but not in NCTC Core)

**X** Academic NCTC Core Curriculum Course

**** WECM Course

**STUDENT HANDBOOK**

Students are expected to follow all rules and regulations found in the student handbook. http://nctc.smartcatalogiq.com/en/2016-2017/Catalog/North-Central-Texas-College-Student-Handbook

**ACADEMIC DISHONESTY**

Scholastic dishonesty shall include, but is not limited to cheating, plagiarism, academic falsification, intellectual property dishonesty, academic dishonesty facilitation and collusion. Faculty members may document and bring charges against a student who is engaged in or is suspected to be engaged in academic dishonesty. See Student Handbook, “Student Rights & Responsibilities: Student Conduct ([FLB(LOCAL)]”.

Consequences for academic dishonesty may include:

1. A zero “0” for the assignment and/or Exam.

**NCTC TOBACOO-FREE POLICY**

NCTC restricts the use of all tobacco products including E-cigarettes, cigarettes, cigars, pipes and smokeless tobacco on campus property. NCTC is aware that tobacco use influences underage students, which cumulates unsightly tobacco litter and interferes with assuring clean air for all who come to NCTC. NCTC recognizes the health hazards of tobacco use and of exposure to second hand smoke. Information on a tobacco cessation program is available for students, faculty, staff who wish to stop using tobacco products. We would like to "thank you" for your help in making our campuses Tobacco-Free. For questions or concerns please contact the Office of Vice President of Student Services at 940.668.4240.

**NCTC EARLY ALERT & NCTC CARES**

For help:

NCTC main phone number: 940-668-7731

Students can TEXT NCTC at: 940-251-0701

Students can email NCTC with advising questions at: advising@nctc.edu.

The NCTC Early Alert program has been established to assist students who are at risk of failing or withdrawing from a course. The instructor may refer students to this program if he or she is missing assignments, failing tests, excessively absent, or has personal circumstances that might be impacting academic performance. If submitted as an Early Alert students will be notified via NCTC e-mail address and then contacted by a Counseling and Testing advisor or counselor to discuss possible strategies for completing your course successfully.

The NCTC CARES (Campus Assessment Response Evaluation Services) Team addresses behavior which may be disruptive, harmful or pose a threat to the health and safety of the NCTC community-such as stalking, harassment, physical or emotional abuse, violent or threatening behavior, or self-harm. Students have the ability to report concerning behavior, which could impact their own safety or the safety of another NCTC student. Just click the NCTC CARES Team logo posted on MyNCTC, or send an e-mail to CARESTeam@nctc.edu.  As always, if there is an immediate threat to safety or welfare (or to another student), please call 911 immediately.

**QUESTIONS, CONCERNS, or COMPLAINTS**

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| Name of Chair/Coordinator: | Dr. Lisa Bellows |
| Office Location: | Gainesville Science Building Office 403A |
| Telephone Number: | 940-668-4252 |
| E-mail Address: | lbellows@nctc.edu |

**Laboratory Safety Guidelines**

***\*\*Although this course is Online, there will be a state required Safety Quiz in the Unit 1 Module.***

1. Locate safety equipment and know how to use the safety equipment.
2. Do not eat or drink in the laboratory.
3. Wear appropriate attire for laboratory work. **Students cannot wear open toed shoes, e.g., sandals, “flip-flops”**
4. Monitor risk: inform the instructor if you are pregnant, taking immunosuppressive medicines, or have any medical condition that might require special precautions in the lab, such as medications that would influence your response or reflex time. Under NO circumstances should you attend a lab session while “under the influence” of any chemical substance.
5. Avoid spills: place liquids toward the center of the bench, away from the edges.
6. Labels: read labels carefully before removing substances from containers.
7. Discard used chemicals and materials into appropriately labeled containers, do not dispose of them down the sink unless specified by the instructor.
8. Broken glass: be careful handling broken glassware with bare hands. Dispose of all cracked or broken glassware in special puncture resistant containers found in the labs, not the regular trash can.
9. Report any spills, accidents, strange occurrences, or other safety incidents to the instructor.
10. Professional conduct is expected to avoid creating dangerous situations. If you have any questions concerning the safety of a procedure, consult your instructor.
11. Immediately report damaged equipment to your instructor.
12. Thoroughly wash hands with soap and water before leaving the laboratory.

**A & P I LECTURE & LAB SCHEDULE (tentative)**

***\*NCTC is closed Sept. 7th for Labor Day and Nov. 25th-29th for Thanksgiving Holiday.***

*\*\*Each unit will open at specific times set by the instructor. Lecture Exams and Lab Practicals will only be open on the specific dates and times below. If there is a conflict please notify the instructor immediately and see the Attendance section of the Syllabus.*

Lab Quizzes are placed next to when they are covered in the Lecture Chapter. Lab Quizzes will be graded within 24 hours. All other assignments will be graded after their due date.

Sometimes there are several assignments due the same day. It is recommended to turn in work and/or complete the work early.

**Unit 1: The Essentials**

***Open:*** ***Monday, August 24th 12:00am***

**Lecture Quiz 1: Covers Ch. 1, 2, and 3. Due: Due: Wednesday, September 16th 11:59pm**

**HW 1 Due: Friday, September 25th 11:59pm**

**Intro Discussion Due: Monday, August 31st 11:59pm**

**Lab Safety** **Due: Monday, August 31st 11:59pm**

**Syllabus Quiz Due: Monday, August 31st 11:59pm**

**Ch. 1 Intro. To Human Body**

**GW Anatomy Due: Monday, August 31st 11:59pm**

**Lab Quizzes:**

**Anatomical Terms Due: Monday, August 31st 11:59pm**

**Fetal Pig Due: Tuesday, September 8th 11:59pm**

**Microscope Due: Tuesday, September 8th 11:59pm**

**Ch. 2 Chemical Level of Organization**

**GW General Chem** **Due: Tuesday, September 8th 11:59pm**

**Ch. 3 Cellular Level of Organization**

**GW Organelles Due: Monday, September 14th 11:59pm**

**Organelles Discussion Due: Monday, September 14th 11:59pm**

**Lab Quizzes:**

**Organelles, Passive Transport, & Mitosis** **Due: Monday, September 14th 11:59pm**

**Ch. 24 Enzymes and Glucose Metabolism**

**GW Respiration Due: Monday, September 21st 11:59pm**

**Lab Quizzes:**

**Enzymes & Metabolism** **Due: Monday, September 21st 11:59pm**

**Ch. 4 Tissues**

**Lab Quizzes:**

**Histology** **Due: Monday, September 28th 11:59pm**

**Lecture Exam 1 & Practical 1**

***Open: Saturday, October 3rd 12:00am***

***Closes: Sunday, October 4th 11:59pm***

**Unit 2: Integument, Skeletal, and Muscular Systems**

***Open: Sunday, October 4th 12:00am***

**Lecture Quiz 2: Covers Ch. 5, 6, 7, and 8. Due: Wednesday, October 21st 11:59pm**

**HW 2 Due: Friday, October 30th 11:59pm**

**Ch. 5 Integument**

**Lab Quizzes:**

**Integument Due: Monday, October 12th 11:59pm**

**Ch. 6 Bone Tissue & Skeletal System**

**GW Bones Due: Monday, October 12th 11:59pm**

**Lab Quizzes:**

**Bone Tissue & General Bone Terms** **Due: Monday, October 12th 11:59pm**

**Ch. 7 & 8 Axial and Appendicular Skeleton Anatomy**

**Lab Quizzes:**

**Skull Due: Monday, October 19th 11:59pm**

**Axial Due: Monday, October 19th 11:59pm**

**Appendicular** **Due: Monday, October 19th 11:59pm**

**Ch. 9 Joints**

**GW Joints Due: Monday, October 26th 11:59pm**

**Ch. 10 Muscular Tissue**

**GW Muscles Pt. 1 Due: Monday, October 26th 11:59pm**

**Lab Quizzes:**

**Joints, Muscle Tissue, & General Muscle Anatomy (Ch. 9 & 10)** **Due: Monday, October 26th 11:59pm**

**Ch. 11 Muscular System Anatomy**

**GW Muscles Pt. 2 Due: Monday, November 2nd 11:59pm**

**Lab Quizzes:**

**40 Muscles Due: Monday, November 2nd 11:59pm**

**Organ System Discussion Due: Monday, November 2nd 11:59pm**

**Lecture Exam 2 & Practical 2**

***Open: Saturday, November 7th 12:00am***

***Closes: Sunday, November 8th 11:59pm***

**Unit 3: Nervous System**

***Open:*** ***Sunday, November 8th 12:00am***

**HW 3 Due: Friday, November 20th 11:59pm**

**Lecture Quiz 3: Covers Ch. 12 and 13. Due: Tuesday, November 24th 11:59pm**

**Ch. 12 Nervous Tissue & Nervous System**

**GW Nervous Tissue Due: Monday, November 16th 11:59pm**

**Lab Quizzes:**

**Nervous Tissue & General Nervous Anatomy** **Due: Monday, November 16th 11:59pm**

**Ch. 13 Nervous Anatomy (mostly CNS)**

**GW Brain Due: Monday, November 23rd 11:59pm**

**Lab Quizzes:**

**Brain Due: Monday, November 23rd 11:59pm**

**Spinal Cord** **Due: Monday, November 23rd 11:59pm**

**Ch. 14 Somatic Nervous System**

**Lab Quizzes:**

**Ear Due: Monday, November 30th 11:59pm**

**Eye** **Due: Monday, November 30th 11:59pm**

**Ch. 15 Autonomic Nervous System**

**GW Drugs Wednesday, December 2nd 11:59pm**

**Drug Research Discussion Wednesday, December 2nd 11:59pm**

**Lecture Exam 3 & Practical 3**

***Open: Saturday, December 5th 12:00am***

***Closes: Sunday, December 6th 11:59pm***

**Finals**

**Final Lecture Exam & Final Lab Practical**

***Open: Tuesday, December 8th 12:00am***

***Closes: Wednesday, December 9th 11:59pm***