

Anatomy & Physiology I

BIOL-2401

Summer II 2021 Section N02 CRN-40459 4 Credits 07/12/2021 to 08/09/2021 Modified 07/07/2021

Meeting Times

This course meets from Monday, July 12, to Monday, August 9, 2021.

This class is entirely online, so I will be counting attendance by whether you complete assignments each day. (Monday through Wednesday for minor assignments; Fridays for exams; Monday Aug 9 for final exam)

You can be dropped from the course for lack of attendance. Three unexcused absences leads to dismissal from the course. See details in Course Policies, below.

Contact Information

Leslie Terzakis

The best way to reach me is by email:

Leslie.terzakis@blinn.edu

Office Hours 10 - 10:30 am Mondays and Tuesdays

I will schedule a Zoom meeting if a student prefers to meet at another time.

Description

3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.

Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. Biology 2401 is the first course in a two semester sequence which examines the systems of the human body using an integrated approach. Lab activities reinforce lecture topics.

Requisites

Prerequisites: A student must be college ready in reading according to TSI college-ready standards.

Recommendation: BIOL 1406 is recommended.

Core Curriculum Statement

Through the Texas Core Curriculum, students will gain a foundation of knowledge in human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning. For details relating to this core course, please see:

<http://www.blinn.edu/academics/core-curriculum.html> (<http://www.blinn.edu/academics/core-curriculum.html>)

Outcomes

Lecture Based Outcomes

Use anatomical terminology to identify and describe locations of major organs of each system covered.

Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.

Describe the interdependency and interactions of the systems.

Explain contributions of organs and systems to the maintenance of homeostasis.

Identify causes and effects of homeostatic imbalances.

Describe modern technology and tools used to study anatomy and physiology.

Lab Based Outcomes

Apply appropriate safety and ethical standards.

Locate and identify anatomical structures.

Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.

Work collaboratively to perform experiments.

Demonstrate the steps involved in the scientific method.

Communicate results of scientific investigations, analyze data and formulate conclusions.

Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations, and predictions.

Materials

Textbook: *Anatomy Physiology-The Unity of Form and Function*, 9th Edition, 2021, Saladin, McGraw-Hill. Packaged with Connect access code

Lab Manual: Biology 2401 Lab Access Code to Top Hat Publishing. Available at both Bryan and Brenham Bookstore. Some lab activities will also be performed in McGraw-Hill Connect account online.

Other: Computer with a Camera and Microphone (NOT a phone, tablet, Chrome book, or iPad), location with good internet access daily.

Course Requirements

All sections of this course regardless of location or modality will include:

1. A minimum of four major exams
2. A minimum of four laboratory exams
3. A comprehensive final exam

Evaluation

The following are required components of a students grade:

1. **Major Exams:** Four major exams covering the lecture material evenly distributed throughout the semester. Information from the laboratory experiments may be included on major exams. Major exams will account for 40% of the final grade.
2. **Laboratory Exams:** Four laboratory examinations on knowledge and skills acquired through laboratory activities, covering histological slides, models, dissections, and any other lab work deemed appropriate by the instructor. Laboratory exams will account for 20% of the final grade.
3. **Quizzes/Homework/Lab Assignments:**
Online Connect Quizzes (1 per chapter) with McGraw-Hill Connect, 2 dropped per semester, worth 5% of semester grade.
Online Connect Smartbook LearnSmart Chapter homework (1 per chapter) with McGraw-Hill Connect, 2 dropped per semester, worth 5% of semester grade.
Lecture Quizzes (1 per chapter) written by Dr Terzakis.
Lab Assignments: Lab book content, associated activities and assessments, 2 dropped per semester, worth 5% of semester grade.
Participation worth 5% of semester grade.
4. **Final Exam:** Comprehensive exam covering the entire course. The final exam will account for 20% of the final grade.

Breakdown:

Lecture Exams (4) 40% of semester grade (10% each)

Lab Exams (4) 20% of semester grade (5% each)

Online text chapter Quizzes (Online Connect chapter assignments) 5% of semester grade (total)

Online text chapter Homework (Online Connect chapter LearnSmart homework) 5% of semester grade (total)

Lab Assignments and Lecture Quizzes 5% of semester grade (total)

Participation 5% of semester grade

Final Exam 20% of semester grade

90 - 100% = A

80 - 89% = B

70 - 79% = C

60 - 69% = D

0 - 59% = F

How to Succeed in this Course

Science courses may be challenging and difficult. Most successful students spend two to four hours studying per week for each credit hour of the course.

Key Points

- Have access to all the materials and technology required for this course (webcam, microphone, computer, reliable internet, etc).
- Attend all classes. Each lecture builds on the previous lecture. Stay ahead of the material.
- Come to class prepared by reading the textbook and/or lab manual beforehand and taking notes before class to improve success.
- If you have a question during lecture, go ahead and ask it. Chances are that at least three other students have this same question.
- Know your deadlines and course policies by looking at the syllabus, instructor announcements, and eCampus dates, schedules, and news items.
- Work through lots of practice problems in addition to your homework.
- Form study groups with your peers.
- Ask your professors for help, visit office hours, and, if needed, request an appointment to see your instructor one-on-one.
 - Be prepared when you visit with your instructor and have questions related to content ready.

- Seek help from Blinn College's tutoring services, if needed.
- Be responsible for your own learning by actively engaging in the course.

Blinn College Policies

All policies, guidelines, and procedures in the [Blinn College Catalog \(http://catalog.blinn.edu/\)](http://catalog.blinn.edu/), [Blinn College Board Policies \(http://pol.tasb.org/Home/Index/1204\)](http://pol.tasb.org/Home/Index/1204), and the [Blinn College Administrative Regulations \(https://www.blinn.edu/administrative-regulations/\)](https://www.blinn.edu/administrative-regulations/) are applicable to this course.

[Specific information on civility, attendance, add/drop, scholastic integrity, students with disabilities, final grade appeal, alternative retailers, campus carry and proctoring arrangements and cost. \(http://www.blinn.edu/syllabus-policies/\)](http://www.blinn.edu/syllabus-policies/)

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through the U.S. Postal Service, or electronically to the student's Blinn Buc e-mail account. Notice shall be deemed received upon actual receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for Blinn Buc e-mail accounts, whichever first occurs.

Information about the changes Blinn has made to the May Minimester, Summer I, and Summer II semesters: [Back with Blinn \(https://www.blinn.edu/back-with-blinn/index.html\)](https://www.blinn.edu/back-with-blinn/index.html).

* Course Policies

[Please read: May Minimester, Summer I, and Summer II 2021 General Classroom Procedures. \(http://www.blinn.edu/back-with-blinn/course-policies.html\)](http://www.blinn.edu/back-with-blinn/course-policies.html) (<http://www.blinn.edu/back-with-blinn/course-policies.html>)

Masks and social distancing will be observed in all lectures and labs. Students will wipe down tables and all equipment before and after use.

Attendance

I do take attendance, based on what days students submit assignments and assessments. I will be checking for assignments, assessments, or exams submitted each Monday, Tuesday, Wednesday, and Friday.

Summer courses drop the student on their 3rd unexcused absence.

Blinn excused absences include Blinn event participation (sports, choir, Resident Assistants, etc.), military participation, religious holy days, dual credit student events representing their school or district, and documented chronic illnesses.

(<http://www.blinn.edu/syllabus-policies/>) These excused absences apply to class days, not exam days, and I require documentation in advance of the absence.

Unexcused absences, such as medical reasons, may be approved on a case-by-case basis, with specific documentation, if the student contacts me by email before the absence. *Approval of an unexcused absence being considered excused is not guaranteed.*

Students dropped due to absences must complete an online readmission application in order to be considered for readmission. Readmission is not guaranteed.

Lectures

My lecture for each textbook chapter (Chs 1-16) is recorded, and available in the course's Content section.

Lecture quizzes will assess the students' knowledge gained in lecture videos and reading the textbook.

Exams

Lecture exams, lab exams, and final exam will be taken online, with proctoring by Honorlock.

I will leave online exams open for 24 hours. Students should take these exams in a quiet room with no books, phones, or electronics.

There must be no background noise, and no people (visible or not) in the room. No speaking to other people. No leaving the room. **Violations of any of the above conditions may result in the student's failing the exam or the course.**

Online exams usually consist of 50 multiple choice questions. The final exam consists of 100 multiple choice questions.

Lecture Exams cover textbook, chapter PowerPoint lectures, lecture quizzes, and occasional lab material.

Lab exams cover lab activities, material/diagrams/problems from the lab manual/Top Hat, any Connect lab activities, lab quizzes, the textbook (especially APR pictures), the Visible Body website, and identification of structures on models and slides. The exam may consist of any of the following: multiple choice, matching, diagrams, ordering, and fill in the blank. The student may be asked to refer to diagrams and/or images of models.

I will schedule make-up exams for Blinn-excused absences to be taken within a week of the original exam. See the Blinn Student Handbook for policies on excused absences. The student must notify me of the absence *before* the exam.

Only 1 make-up lab OR lecture exam is allowed, in the event of an excused absence.

There will be no make-up for the final exam.

The use of notes, textbooks, lab manuals, cell phones, laptops, headphones, other electronic devices or help from other people is NOT allowed during the exam, and is considered cheating.

Talking or leaving the test room while taking the exam is not permitted unless there is an emergency situation.

Exams are proctored (watched and video recorded) by Honorlock. Violations trigger notifications to the instructor for things such as motion, blurry screen, voices detected, improper dress. I will watch the students' exam videos after such a notification, and determine if exam interference or cheating occurred. True cheating will result in a failing grade.

Lab Assignments

Lab assignments include lab activities from the Top Hat lab book and Connect Lab activities, lab quizzes, and virtual labs. I do not take late work on Lab assignments. I drop 2 Lab assignments (might be called Lab Quizzes in the Gradebook).

The lab book is available through Top Hat on an online platform. Students will need an access key code to make their Top Hat account (sent by the instructor in an email). The Top Hat labs will frequently refer the student to do an interactive online activity through Connect (see next heading). Students will need an access key code to make their Connect account (bought at Blinn Bookstore).

Online Assignments (McGraw Hill Connect)

Connect offers online minor grade assessments of the McGraw Hill Anatomy and Physiology textbook.

The lowest 2 of each of online homework (Smartbook/LearnSmart) and online chapter Quiz grades will be dropped. The remaining highest scores will average to each be worth 5% of your course grade.

So the online textbook assignments all together are worth 10% of your grade, and I drop 4 grades in all.

Online access:

Please access the McGraw Hill Connect website by doing the following:

Log in to eCampus, click on our course homepage, click on the McGraw Hill block on the lower right side of the screen. Connect will open.

If this is your first time to access Connect, please register and enter/purchase an access code. (You should have received an access code when you purchased the textbook.) If you already have a Connect account, you may need to re-enter an access code. If you already have a Connect account and access code from Anatomy and Physiology last semester, then you should gain instant access and no further information or payment should be required. The Connect access code is valid for 1 consecutive year.

McGraw Hill has offered this 3 minute video to assist students in registering and logging in for the first time:

<https://vimeo.com/album/5316669/video/281875370>

If you have any problems, please visit the Customer Technical Support site (1-800-331-5094). Do not ask your professor to assist you with access.

Problem Resolution

If you have a complaint about your class, you should first request a conference with your instructor to try and resolve the problems or issues. If the problems or issues cannot be resolved at the instructor level, you should request a conference with the Biology Department Head.

Dr. Michelle McGehee

Office: D-201

Phone: 979-209-7378

Email: michelle.mcgehee@blinn.edu

Laboratory Safety

Students will be provided with laboratory safety training during the first week of class. Students are expected to follow all safety rules including rules related to proper lab attire. **Closed toe shoes are required in the laboratory.**

Gloves, goggles/safety glasses will be worn for most labs. Students are expected to follow all safety rules including rules related to proper lab attire. Closed toe shoes are required in the laboratory, as well as full clothing coverage from shoulders to below the knees, with a lab jacket. The instructor will indicate when goggles and gloves must be worn. Long hair must be tied back. No loose clothing or jewelry. Students must not be in the lab room unless an instructor is present. All bags and personal items must be on shelves or on hooks, not on or below lab tables. Lab dress code and rules apply anytime a student is in the lab room, regardless of whether there is an experiment going on. (Even on review and exam days.) Cloth lab coats will be autoclaved and returned at the end of the semester; paper lab coats will not be returned.

No hats or hoods in lecture or lab room. No electronics unless specified by the professor.

There must be **no visible food nor drink nor phones in classrooms nor lab room**.

Students who fail to follow these rules will be required to leave the lab and will be assigned an unexcused absence for the entire class day.

For online labs, in demonstration videos, pay careful attention to all steps and all equipment used. Be able to state the duties and steps performed by each participant in a lab.

Schedule

Week One	Recorded Lecture Details	Lab Meeting Details	Lecture Minutes	Lab Min	Contact Hours
Mon 7/12/2021	Introduction Orientation Ch 1 Fundamentals Ch 2 Chemistry	Lab 1 Safety/Ethics/Teamwk Lab 2 Microscope Lab 3 Cell Structure	120	120	4.8
Tue 7/13/2021	Ch 2 Chemistry of Life	Lab 4 Body Organization Lab 5 Metric/Solutions/ Transport Lab 6 Epithelial Tissue	120	120	4.8
Wed 7/14/2021	Ch 3 Cells Ch 4 Cell Function Ch 5 Histology	Lab 7 Connective Tissue Lab 8 Muscle/Nervous Tissue Lab 9 Integumentary System	120	120	4.8

Thur 7/15/2021	Ch 5 Histology Ch 6 Integumentary System Review Chs 1-6	Review Labs 1-9	120	120	4.8
Fri 7/16/2021	Review Lecture Exam 1 (Chs 1-6)	Review Lab Exam 1 (Labs 1-9)	120	120	4.8
Week Two					
Mon 7/19/2021	Ch 7 Bone Tissue	Lab 10 Bone Tissues/Cells Lab 11 Skull	120	120	4.8
Tue 7/20/2021	Ch 8 Skeletal System	Lab 12 Vertebral Column and Thoracic Cage Lab 13 Pectoral Girdle and Upper Limb	120	120	4.8
Wed 7/21/2021	Ch 9 Joints	Lab 14 Pelvic Girdle and Lower Limb Lab 15 Joint Anatomy and Function	120	120	4.8
Thur 7/22/2021	Ch 11 Muscular Tissue Review Chs 7, 8, 9, 11	Review Labs 10-15	120	120	4.8
Fri 7/23/2021	Review Lecture Exam 2 (Chs 7-9, 11)	Review Lab Exam 2 (Labs 10-15)	120	120	4.8
Week Three					
Mon 7/26/2021	Ch 10 Muscular System	Lab 16 Muscles of Head and Neck Lab 17 Muscles of the Upper Body part 1	120	120	4.8
Tue 7/27/2021	Ch 12 Nervous System	Lab 18 Muscles of the Upper Body part 2 Lab 19 Muscles of the Lower Body	120	120	4.8
Wed 7/28/2021	Ch 13 Spinal Cord, Nerves, Reflexes	Lab 20 Nervous Tissue, Muscle Fatigue and Recruitment Lab 21 Spinal Cord, Nerves, and Reflexes	120	120	4.8
Thur 7/29/2021	Review Chs 10, 12, 13	Review Labs 16-21	120	120	4.8
Fri 7/30/2021	Review Lecture Exam 4 (Chs 10, 12, 13) Q Drop Date	Review Lab Exam (Labs 16-21)	120	120	4.8
Week Four					
Mon 8/2/2021	Ch 14 Brain and Cranial Nerves	Lab 22 Human Brain and Cranial Nerves Lab 23 Sheep Brain	120	120	4.8
Tue 8/3/2021	Ch 15 Autonomic Nervous System	Ch 24 Scientific Method and Baroreflex Ch 25 General and Chemical Senses	120	120	4.8
Wed 8/4/2021	Ch 16 Sense Organs	Lab 26 Hearing and Equilibrium Lab 27 Vision	120	120	4.8
Thur 8/5/2021	Review Chs 14, 15, 16	Review Labs 22-27	120	120	4.8
Fri 8/6/2021	Review Lecture Exam 4 (Chs 14-16)	Review Lab Exam 4 (Labs 22-27)	120	120	4.8
Week Five					
Mon 8/9/2021	Comprehensive Final Exam				2.4

	Total Contact Hours			96
--	---------------------	--	--	----