

BIO 160 Introduction to Anatomy and Physiology

Polytechnic Campus | Fall 2022 (08/18 - 12/02) MWF | 9:05am-9:55am | PRLTA 309

Course and Faculty Information

Course Description: Terminology and essential concepts in human anatomy and physiology, as well as the structure and function of the human body and related pathologies. Designed for students in the health-related professions. Acquaints the student with human anatomy, structure and function, and basic disease concepts. Organizes and presents course concepts by organ systems, and the laboratory component of the course emphasizes human structure and function. The course has 3 contact hours for lecture and 2 contact hours for lab per week.

Credits: 4

Instructor: Dalya Lateef, PhD | Pronouns: She/Her/Hers

Personal Statement: I have loved science ever since I was a kid. (Animal Planet was my favorite channel!) As for my training and career, I earned my Ph.D. in Integrative Biosciences with a concentration in neurogastrophysiology from Tuskegee University. This was followed by 5 years of postdoctoral training at the National Institute of Diabetes and Digestive and Kidney Diseases at the NIH. There I conducted biomedical research on neural and molecular mechanisms that control food intake, energy metabolism, blood pressure and heart rate. Although I greatly enjoy research, I absolutely love being an educator. For the last several years, I've taught biology, anatomy and physiology courses at the graduate, undergraduate and high school levels, and I'm happy to currently be a lecturer in applied biology here at ASU.

Inclusive Teaching Philosophy: I ascribe to ASU's commitment to inclusion. Our diversity is our strength and provides us with the broadest perspectives we need for effective, inclusive and well-rounded learning experiences. This philosophy is reflected in my diverse teaching and assessment styles, my incorporation of science history that highlights scientists from various ethnic and racial groups and my respect for each student's personal experience. Please talk to me if you have special needs that you would like me to consider as you progress in this course.

Contact Info: Office: Wanner Hall 340 J | Email Address: dalya.lateef@asu.edu

Note: Email is preferred. Please do not send messages through Canvas. I don't always receive Canvas message notifications, so your Canvas messages may go unanswered or answers may be delayed.

Student Hours: Student hours are held via Zoom on Tuesdays from 10:30am-11:30am at https://asu.zoom.us/j/5404707942 by appointment. If your schedule cannot accommodate this time, please email me so that we can schedule another meeting time that works better.

College Contact: This course is offered by the <u>College of Integrative Sciences and Arts</u> (CISA). For more information about the college, visit our website: https://cisa.asu.edu. If you have questions about this course, please speak with your instructor. If your instructor is unable to address your questions, please send your inquiry to cisa@asu.edu.

Course Learning Outcomes

At the completion of this course, students will be able to:

- 1. Pronounce, define and utilize the terminology associated with anatomy and physiology.
- 2. Identify correctly the anatomical structures of the major organ systems of the human body.
- 3. Describe the general physiology of the major organ systems of the human body.
- 4. Analyze changes in science and healthcare technology and make informed decisions relative to the topics of this course.
- 5. Describe the impact of various pathologies on organ systems.

Course Objectives

This course will

- 1. Introduce students to terminology and concepts that are used to describe anatomical and physiological parts and processes.
- 2. Familiarize students with selected facts and important processes in the physiology of several organ systems, including the endocrine, cardiovascular, skeletomuscular, digestive, urinary and nervous systems.
- 3. Introduce students to selected pathologies through realistic clinical presentations and case studies.

Sensitive Content

Please be aware that some BIO 160 course content may be considered sensitive, offensive, troubling or difficult to review by some students. Including, but not limited to, graphic images of the human body. My intention is not to be offensive but teach you about the human body. If you find some of the material troubling please contact me immediately.

Cadavers

BIO 160 Lab may utilize human cadavers. The use of actual human bodies for learning anatomy is an invaluable tool that provides an important learning experience. The cadavers will be predissected, so you will be responsible for identifying structures; not dissecting the cadavers. Students are invited to touch and explore the cadavers, however if you feel uncomfortable you may view the cadaver without any physical contact. There may be questions pertaining to the anatomical structures of the cadaver on your lab practicals, therefore you will need to get close enough to identify those structures. If you are extremely anxious, then at first just try viewing from a distance for a short period of time. Move closer as you feel more comfortable. If your religion requires that you have special ceremonies performed before you can be in the same room with the cadaver, you will need to have it done prior to the first cadaver lab. Please consult the lab instructor for important dates. If you have any questions or issues pertaining to the cadavers, you must talk to me by the end of the second week of the semester. Taking pictures of the cadavers will not be allowed.

Textbooks, Required Readings and Materials

Connect Access for Mader's Understanding Human Anatomy & Physiology by Longenbaker, Tenth Edition (McGraw Hill) is required. The loose-leaf textbook (not required) is available through the ASU Bookstore or through Connect. The price of the physical book may be different depending on the source.

Course Access

Your ASU courses can be accessed by both <u>my.asu.edu</u> and <u>asu.instructure.com</u>; bookmark both in the event that one site is down.

Computer Access Requirements

Most in-class and out-of-class assignments and assessments in this course require the use of a PC or Apple laptop. You may also use an iPad or Chromebook; however, these devices may not work for proctored exams. It is recommended that your internet download speed is at least 5.0 mbps. You can use this <u>tool to test your current connection.</u>

If you are not able to personally finance the equipment that you need for class, ASU has a laptop and WiFi hotspot checkout program available through <u>ASU Library</u>.

Who is eligible?

• Any currently enrolled ASU student is eligible to checkout a laptop or WiFi hotspot. The current availability of laptops can be found here.

Borrowing and returning laptop rules

- Laptops are lent on a first-come, first-serve basis, and cannot be reserved in advance. They can be returned at any time, but will be due at the conclusion of the semester.
- Rentals are limited to one laptop per student.
- Laptops are available for checkout at the following libraries on all four campuses: (Please check online for current library hours)
 - Downtown Phoenix campus Library
 - Polytechnic campus Library
 - Tempe: Hayden and Noble Libraries
 - West campus: Fletcher Library
- Return laptops to any ASU Library Information Desk (not at the drop box or other location)
- Refer to ASU Library Computer Use Policy and ASU Computer, Internet, and Electronic Communications Policy.
- Borrowers are responsible for loss, damage, and theft of the laptop while in their possession. Borrowers should verify the condition of the laptop at the time of checkout and upon check-in.

Additional Requirements

This course requires the following technologies:

- Web browsers (Chrome, Mozilla Firefox, or Safari)
- Adobe Acrobat Reader (free)
- Webcam, microphone, and speaker
- Microsoft Office (Microsoft 365 is free for all currently-enrolled ASU students)
- Reliable broadband internet connection (DSL or cable) to stream videos.

Student Success

To be successful:

- check the course daily
- read announcements
- read and respond to course email messages as needed
- complete assignments by the due dates specified
- communicate regularly with your instructor and peers
- create a study and/or assignment schedule to stay on track
- access ASU Online Student Resources or CISA Academic Resources

Grading

Breakdown

Category	% of Grade	# dropped from final grade
Exams	45%	Lowest 1 dropped
Quizzes	20%	Lowest 1 dropped
Homework	10%	N/A
Lab	25%	N/A

* You will not receive a separate letter grade for the lab portion of this course. However, if you fail to earn 60% or more in the lab, you will get an "E" for the overall BIO 160 course (lecture + lab) grade.

Grade Scale

Your grade will be determined based on the following grading schema:

A	Percentage	Definitions
A+	100-97%	
A	<97-94%	Excellent
A-	<94-90%	
B+	<90-87%	
В	<87-84%	Good
B-	<84-80%	
C+	<80-77%	
С	<77-70%	Average
D	<70-60%	Passing
Е	<60%	Failure
EU	<60%	Failing Did Not Complete
EN	0%	Failing Never Participated

Grading Procedure

Grades reflect your performance on assignments and adherence to deadlines. Grades on assignments will be available within 7 days of the due date in the Gradebook. Your instructor does not round up, offer additional work/bonus opportunities, or alter grades in any way following posting of the final grade. Extra credit opportunities may be offered during the semester at the instructor's discretion.

Late or Missed Work

Late or missing work is generally not accepted and will earn a "0" grade. At the end of the semester your lowest grade in certain categories will be dropped from your final grade (see the Grading Breakdown above). That way, if you miss one of these assessments, it may not affect your final grade in the course. In the case of emergencies and unavoidable life circumstances, the instructor may consider accommodations on a case-by-case basis. Students with written permission (via email) from the instructor may make up work on a designated Makeup/Study Day, as scheduled in the syllabus.

Follow the appropriate University policies to request an <u>accommodation for religious practices</u>, or to request accommodation for missed assignments <u>due to University-sanctioned activities</u> or active military service.

Attendance Policy

Attendance is not recorded in this course. However, class attendance is necessary to complete exams, quizzes and in-class activities. Because of this, I strongly encourage you to attend class regularly so that you do not miss any work.

Communicating with your Instructor and Classmates

Classroom Community

To build a course climate that is comfortable for all, it is important that students (1) display respect for all members of the class – including the instructor and students; (2) pay attention to and participate in all interactive student partner/instructor sessions and activities; and (3) observe the rules of appropriate online behavior (also known as *netiquette*). This term is defined by the instructor and includes keeping course discussion posts and oral communication with other students (or the instructor) focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. In addition, they must avoid racist, sexist, homophobic, or other negative language that may unnecessarily exclude course members. This is not an exhaustive list of behaviors; rather, it represents examples of the types of things that can have a dramatic impact on the course environment. Your final grade may be reduced each time you engage in the types of negative behaviors indicated above.

Email

ASU email is an <u>official means of communication</u> among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly.

All instructor correspondence will be sent to your ASU email account.

Course Outline

The following outline is a general guide and is subject to change.

Week	Week Of	Topics	Chap	Note (s)
1	Aug 14	Introduction to Anatomy and Physiology	1	
2	Aug 21	Introduction to Anatomy and Physiology; Body Tissues and Membranes	1; 4	
3	Aug 28	Body Tissues and Membranes; The Integumentary System	4; 5	
4	Sep 4	The Skeletal System	6	Labor Day/No Class (M, September 5th)
5	Sep 11	The Muscular System; The Nervous System	7; 8	Exam 1-September 12th
6	Sep 18	The Nervous System; The Endocrine System	8; 10	
7	Sep 25	The Endocrine System	10	
8	Oct 2	Blood	11	Exam 2-October 3rd
9	Oct 9	Blood; The Cardiovascular System	11; 12	Fall Break (M-T, October 8th-11th); Makeup/Study Day-October 14th
10	Oct 16	The Cardiovascular System	12	
11	Oct 23	The Cardiovascular System; The Lymphatic System; The Respiratory System	12; 13; 14	
12	Oct 30	The Respiratory System; The Digestive System	14; 15	
13	Nov 6	The Digestive System	16	Exam 3-November 7th; Veterans Day/No Class (F, November 11th)
14	Nov 13	The Urinary System and Excretion; The Reproductive System	16; 17	
15	Nov 20	The Reproductive System	17	Thanksgiving Holiday/No Class (Th-F, November 24th- 25th)
16	Nov 27	The Reproductive System	17	Makeup/Study Day (November 30th); Exam 4

	and Last Day of Class
	December 2

Assignment Details

Homework

There will be several homework assignments in this course. These assignments are designed to help you review materials covered in lecture that you may see on quizzes and exams. Homework assignments will be accessible on McGraw Hill Connect and the deadlines will be posted on Connect and Canvas.

Quizzes

There will be several quizzes in this course. Your 1 lowest quiz grade will be dropped from your final grade. The dates of the quizzes will be announced on Canvas and are subject to change. Unless otherwise stated, quizzes may consist of 5-20 questions, which may be multiple choice, true/false, fill in the blank, matching or short essay. You must bring your computer to class in order to complete these quizzes.

Exams

There will be 4 exams in this course. Your lowest 1 exam grades will be dropped from your final grade. The dates of the exams are listed in the Course Outline above and are subject to change. Unless otherwise stated, exams may consist of 20-60 questions, which may be multiple choice, true/false, fill in the blank, matching or short answer. An exam may be in the form of a case study. Exam content may be cumulative. There is no final exam scheduled for this course. You must bring your computer to class in order to complete these exams.

Extra Credit

Extra credit opportunities may be assigned in this class (at the instructor's discretion) and may be in the form of in-class participation, a project, reading assignments, ASU IRB-approved research participation, etc. These assignments are not required, may be assigned sporadically throughout the semester, will not always be announced and cannot be made up if missed. Students must be in class, on-time and present for the entire class period to take advantage of most extra credit opportunities.

Submitting Assignments

For your own protection, you should keep a copy of everything you hand in, and you should keep your graded assignments at least until grades are finalized at the end of the semester in the event you wish to contest any grades.

Assignment due dates follow Arizona Standard time. Click the following link to access the <u>Time</u> <u>Converter</u> to ensure you account for the difference in time zones. Note: Arizona does not observe daylight savings time.

Course Time Commitment

Coursework includes all learning activities including reading, watching videos, studying, and completing assignments. Arizona Board of Regents (ABOR) requires 45 hours of coursework per credit for college-level courses, which translates to:

- 1 credit hour = 45 total hours
- · 2 credit hours = 90 total hours
- · 3 credit hours = 135 total hours
- · 4 credit hours = 180 total hours
- 5 credit hours = 225 total hours

ASU courses range in length from 6 weeks to 15 weeks. Below is a breakdown of the 135-hour required time commitment for a three-credit course divided among weeks for courses of various lengths.

Course Length	Time on Coursework per	Total Time Requirement for a
	Week for a 3-credit course	3-credit Course
6 weeks	22.5 hours	135 hours
7.5 weeks	18 hours	135 hours
8 weeks	17 hours	135 hours
15 weeks	9 hours	135 hours

Drop and Add Dates/Withdrawals

If you are unable to take this course for any reason, be aware that there is a limited timeline to <u>drop or add</u> the course. Consult with your advisor and notify your instructor to add or drop this course. If you are considering a withdrawal, review the following ASU policies: <u>Withdrawal from Classes</u>, <u>Withdrawing as</u> a Financial Aid Recipient, Medical/Compassionate Withdrawal, and a Grade of Incomplete.

Grade Appeals

Students must first speak with the instructor of the class to discuss any disputed grades. If, after review, a resolution is not achieved, students may proceed with the appeal process. Student grade appeals must be processed in the regular semester immediately following the issuance of the grade in dispute (by commencement for fall or spring), regardless whether the student is enrolled at the university. Complete details are available in the CISA Grade Appeals policy.

Academic Integrity

Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic

dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see provost.asu.edu/academicintegrity.

If you fail to meet the standards of academic integrity in any of the criteria listed on the university policy website, sanctions will be imposed by the instructor, college, and/or dean. Academic dishonesty includes, but is not limited to, cheating on an academic evaluation or assignment, plagiarizing, academic deceit (such as fabricating data or information), or falsifying academic records. Turning in an assignment (all or in part) that you completed for a previous class is considered self-plagiarism and falls under these guidelines. Any infractions of self-plagiarism are subject to the same penalties as copying someone else's work without proper citations. Students who have taken this class previously and would like to use the work from previous assignments should contact the instructor for permission to do so.

If you have any questions about your work and the academic integrity policy, please discuss your assignment or concerns with your instructor, teaching assistant, or your college Academic Integrity Officer in advance of submitting an assignment. Student resources on Sun Devil Integrity and strategies for completing your work with integrity and avoiding plagiarism are available here: ASU Student Resources for Academic Integrity or provost.asu.edu/academicintegrity for more information.

Harassment Prohibited

ASU policy prohibits harassment on the basis of race, sex, gender identity, age, religion, national origin, disability, sexual orientation, Vietnam era veteran status, and other protected veteran status. Violations of this policy may result in disciplinary action, including termination of employees or expulsion of students. Students are encouraged to report harassment to instructors and the Dean of Students Office.

Student Conduct

ASU and the College of Integrative Sciences and Arts expects and requires its students to act with honesty, integrity, and respect. Required behavior standards are listed in the Student Code of Conduct and Student Disciplinary Procedures, Computer, Internet, and Electronic Communications policy, ASU Student Academic Integrity Policy, and outlined by the Office of Student Rights & Responsibilities. Anyone in violation of these policies is subject to sanctions. Students are entitled to receive instruction free from interference by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per Instructor Withdrawal of a Student for Disruptive Classroom Behavior. The Office of Student Rights and Responsibilities accepts incident reports from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

Title IX

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex

can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at https://sexualviolenceprevention.asu.edu/faqs.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violece. ASU Counseling Services, https://eoss.asu.edu/counseling, is available if you wish to discuss any concerns confidentially and privately. ASU online students may access 360 Life Services, https://goto.asuonline.asu.edu/success/online-resources.html.

Student Accessibility and Inclusive Learning Services (SAILS)

Qualified students with disabilities who will require disability accommodations in this class are encouraged to make their requests to the instructor at the beginning of the semester either during office hours or by appointment. Note: Prior to receiving disability accommodations, verification of eligibility from the Student Accessibility and Inclusive Learning Services is required. Disability information is confidential.

Student Accessibility and Inclusive Learning Services (eoss.asu.edu/drc)

Email: DRC@asu.edu

SAILS Phone: 480-965-1234 **SAILS FAX:** 480-965-0441

Tutoring

Free tutoring support is available in person and online for most courses. Services are offered through ASU's University Academic Success Programs for currently enrolled students.

- Tutoring is available in math, business, science, statistics, and engineering courses.
- Writing tutoring is available for any writing project at any stage of the writing process.
- Supplemental Instruction (SI) facilitates collaborative study groups for selected courses.
- Graduate academic tutoring is available for writing and statistics.
- Academic skills tutoring can help with critical reading, study skills, note taking, and more.
- Resources are available through our YouTube channel, Zoom recordings, and handouts.

Visit https://tutoring.asu.edu or call (480) 965-9072 for more information about these services, to view our schedules, or to book an appointment.

Statement on Inclusion

Arizona State University is deeply committed to positioning itself as one of the great new universities by seeking to build excellence, enhance access, and have an impact on our community, state, nation, and the world. To do that requires our faculty and staff to reflect the intellectual, ethnic, and cultural diversity of our nation and world so that our students learn from the broadest perspectives, and we engage in the advancement of knowledge with the most inclusive understanding possible of the issues we are

addressing through our scholarly activities. We recognize that race and gender historically have been markers of diversity in institutions of higher education. However, at ASU, we believe that diversity includes additional categories such as socioeconomic background, religion, sexual orientation, gender identity, age, disability, veteran status, nationality, and intellectual perspective.

Mental Health

As a student, like anyone else, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating, and/or lack of motivation. These emotional health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. ASU Counseling Services provides counseling and crisis services for students who are experiencing a mental health concern. Any student may call or walk-in to any ASU counseling center for a same-day or future appointment to discuss any personal concern. Here is the website: eoss.asu.edu/counseling. After office hours and 24/7 ASU's dedicated crisis line is available for crisis consultation by calling 480-921-1006.

Establishing a Safe Environment

Learning takes place best when a safe environment is established in the classroom. In accordance with <u>SSM 104-02</u> of the Student Services Manual, students enrolled in this course have a responsibility to support an environment that nurtures individual and group differences and encourages engaged, honest discussions. The success of the course rests on your ability to create a safe environment where everyone feels comfortable to share and explore ideas. We must also be willing to take risks and ask critical questions. Doing so will effectively contribute to our own and others' intellectual and personal growth and development. We welcome disagreements in the spirit of critical academic exchange, but please remember to be respectful of others' viewpoints, whether you agree with them or not.

All incidents and allegations of violent or threatening conduct by an ASU student (whether on- or off-campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. If either office determines that the behavior poses or has posed a serious threat to personal safety or to the welfare of the campus, the student will not be permitted to return to campus or reside in any ASU residence hall until an appropriate threat assessment has been completed and, if necessary, conditions for return are imposed. ASU PD, the Office of the Dean of Students, and other appropriate offices will coordinate the assessment in light of the relevant circumstances.

Prohibition of Commercial Notetaking Services

In accordance with <u>ACD 304-06 Commercial Note Taking Services</u>, written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the note taker's name as well as the instructor's name, the course number, and the date.

Course Evaluation

Students are expected to complete the course evaluation. The feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available. The results are always anonymous and cannot be reviewed by the instructor/department until after final grades have been posted.

Trigger Warning

Please note that some course content may be deemed offensive by some students, although it is not my intention to offend anyone. In addition, some materials that we link with online might also be considered offensive, troubling, or difficult to review in terms of language or graphics. I attempt to provide warnings when introducing this kind of material; yet, if I forget to do so, or if something else (in my materials or posts from fellow students) seems offensive, please contact me at dalya.lateef@asu.edu or the faculty head, Douglas Green.

Academic Affairs Manual

For a complete guide to Arizona State University course policies, please refer to the <u>Academic Affairs Manual (ACD)</u>.

Syllabus Disclaimer

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Remember to check your ASU email and the course site often.