

## BIOSC 0805: The Human Body

W 6:00-8:30

1501 Posvar

Fall 2021 (2221)

**Instructor:** Dr. Jessica Wandelt

**Email:** wandelt@pitt.edu

**Drop-in Office Hours:** Wednesdays 4:00-5:00 and Thursdays 10:00—11:00 via Zoom (links in Canvas). You are welcome (and encouraged!) to drop-in my office hours *without* making an appointment. These are times when you can ask questions regarding course material and discuss general class issues or approaches to studying. You are also welcome to just hang-out to listen to other students' questions while you do your homework.

**Office Hours by Appointment:** For issues that you would like to discuss privately. This will allow us to confidentially discuss your specific areas of concern. These appointments are not for discussion of general class material. Please email to arrange.

### ◆Covid Mitigation Policies◆

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During this pandemic, it is extremely important that you abide by the [public health regulations](#), the University of Pittsburgh's [health standards and guidelines](#), and [Pitt's Health Rules](#). These rules have been developed to protect the health and safety of all of us. Universal [face covering](#) is **required** in all classrooms and in every building on campus, without exceptions, regardless of vaccination status. This means you must wear a face covering that properly covers your nose and mouth whenever you are in the classroom. **If you do not comply, you will be asked to leave class.** It is your responsibility have the required face covering when entering a university building or classroom. For the most up-to-date information and guidance, please visit [coronavirus.pitt.edu](https://coronavirus.pitt.edu) and check your Pitt email for updates before each class.

If you have any symptoms of Covid, are required to isolate or quarantine, or become sick contact me as soon as possible to discuss arrangements.

### ◆Course Overview and Objectives◆

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This is a course in human biology and physiology *for students not majoring in biology*. The goal is to provide students with an understanding of fundamental principles of life with an emphasis on the human body and its physiological functioning. We will start with a basic overview of how this course relates to everyday life and encourages scientific literacy for the non-scientist. We will then use common questions as a jumping off point to successively examine the structure and function of human organ systems. Emphasis will be made on understanding the mechanisms involved in normal physiology and how changes can lead to disease. More detailed course objectives will be provided for each topic.

This course fulfills one Dietrich School of Arts and Sciences **Natural Science General Education Requirement (GER)** as described for the GERs starting Fall 2018 (term 2191). That GER reads as follows:

*Three Courses in the Natural Sciences.* These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

### ◆Course Delivery and Organization◆

This course will be run as a flipped course where the timing of learning approaches is flipped relative to a traditional class: content acquisition will be done 'at home' independently and practicing of material will occur during live class time.

- At home, on your own:
  - Most course content (*learning*) will be delivered via the [TopHat text-book](#) with included lecturer-made videos (available weekly). It is expected that these will be completed before our weekly class meetings.
  - Weekly homeworks will be interwoven with the assigned readings and videos in the TopHat text book.
- In class, as a group
  - We will have live/synchronous class meetings every Wednesday from 6:30 – 9:00
  - From August 27<sup>th</sup>-September 10<sup>th</sup> course will be available on Zoom or in-person
  - Starting September 13<sup>th</sup>, class will be in-person and not available via Zoom (\*subject to change)
  - During our regularly scheduled course meetings, we will have a live/synchronous review and a graded group activity
  - The review will revisit course material and introduce approaches to thinking about content (*studying*; ~1 hour)
  - Groups will break out to apply the concepts in weekly TopHat assignments (*studying*; ~ 1 hour)

This course format will require a **substantial change** in mindset from traditional lecture courses. I will be providing suggested approaches to support you in finding a workable routine.

You are *strongly* encouraged to attend and participate in all class meetings: this will be the best way to ensure that you understand and can use the material. In addition, a part of your grade will be determined by your weekly participation in group activities (see below). Just looking at the provided videos or the textbook will not be an adequate substitute for attending class. In addition, just attending ‘class’ will not be an adequate substitute for putting in the time outside of class to learn the content.

\*\*\*\*\**Any changes to class organization will be announced on Canvas and during live class meetings.*\*\*\*\*\*

### ◆Course Supplies and Technology◆

**Canvas (required):** Our course Learning Management System. This will be the main point of communication and for sharing course materials throughout the semester - including access to TopHat, quizzes, and other assignments. Please visit regularly and/or set your notifications so that you do not miss important information.

**TopHat Text (required):** We will be using a custom-built interactive [Anatomy & Physiology Top Hat Textbook](#) for this class. This book offers a number of benefits: (1) it is more wallet-friendly than a traditional textbook, (2) it allows streamlined content to be presented, and (3) it will allow integration of recorded lectures, homework, and group activities.

You will be able to access TopHat through Canvas. An email invitation will be sent to you by email, but if don’t receive this email, you can register by simply visiting our course website (<https://app.tophat.com/e/512442>). Note: our Course Join Code is **512442**. Your textbook will be applied at checkout for \$30. Please reach out if you have any issues or concerns with purchasing the text. Don’t worry if you don’t see any content in the course right away, I will make it available to you as we progress through the semester.

If you need help with TopHat, contact the Support Team directly by way of email ([support@tophat.com](mailto:support@tophat.com)), the in-app support button, or by calling 1-888-663-5491.

**Zoom (required):** [pitt.zoom.us](https://pitt.zoom.us). All Pitt students have a free zoom account. Please make sure to log-in and configure your account. We will be using Zoom for at least the first two class meetings as well as for office hours. You will be able to access Zoom through Canvas.

**Other:** Supplemental course materials posted on Canvas (review checklists, powerpoint notes, etc.; these will be on each Module’s page) to keep up with material, colored pens/pencils for organizing your notes, and a device that can access the internet for in-class activities and access to classwork.

### ◆Grading◆

Your overall grade in this course will be determined by:

Individual quizzes	440 points (11 @ 40 points each; lowest grade dropped) = 44%
Homework	220 points (11 @ 20 points each; lowest grade dropped) = 22%
Group activities	240 points (12 @ 20 points each; lowest grade dropped) = 24%
Human Disease project	100 points (broken up over the semester) = 10%

Total =1000

*Letter grades are determined using the conversion scale shown below:*

A+ = 98% and above	B+ = 88-89%	C+ = 78-79%	D+ = 68-69%	F = 59% and below
A = 92-97%	B = 82-87%	C = 72-77%	D = 62-67%	
A- = 90-91%	B- = 80-81%	C- = 70-71%	D- = 60-61%	

I will assign final grades based on the grades that you EARN. I will NOT give extra points so that you can move up to the next letter grade. I will NOT regrade assignments to see if we can “find” you a few more points. I will NOT give extra credit to individual students. These practices are unethical and amount to grade inflation. If required, scores will be scaled to a mean of 75%, but you should not count on this.

### Quizzes (platform: Canvas)

(44% of final course grade) There will be a weekly quiz available Thursday-Monday each week during the semester starting 9/9 (see course schedule). These are open book, but are to be completed individually with no collaboration or sharing between students. You will have one hour to complete a quiz from the time you open it, but may take the quiz at any point when it is open. The dates and hours will NOT change unless there are extenuating circumstances that affect the professor or the entire class.

All quizzes will be based on the material covered in the assigned readings, videos, class reviews, and group activities. Due to the nature of the course material, the quizzes will be cumulative, however the focus of each will be on the most recent material. Quizzes will emphasize application and synthesis of material, with few points dedicated to factual material (memorization). Quizzes will be primarily multiple choice, but may include some very short answer and fill-in-the-blank questions. Further details regarding quiz procedure will be posted on Canvas.

There are 12 scheduled quizzes. **The lowest quiz grade will be dropped.** If you miss a quiz, you may count it as your dropped score. If you need to miss more than one for reasons outside your control, the instructor will work with you individually to come up with a plan to ensure that your grade properly reflects the work that you have put in and your mastery of the subject.

If you are unhappy with a quiz grade or are unsure of an answer, you should come to office hours for additional guidance as soon as possible. If you wish to contest the grading of a question on a quiz, you must submit a written request to your instructor within one week of the date the quiz outlining your argument. Formal re-grade submissions are not required for mathematical errors.

### Weekly group activities (platforms: TopHat and maybe Zoom)

(24% of your final grade) We have a scheduled group activity each week of the semester. These activities will be completed together in class via TopHat. The activities will include understanding, application, and synthesis questions. While the work will be done as a team collaboration, each student will submit their own answers and then the group will report back to the class. Your instructor will be available to answer questions. More details on group activities will be given in class and on Canvas.

There will be 13 group activities. **The lowest group activity grade will be dropped.** If you need to miss more than one group activity for reasons outside of your control, you should communicate with your instructor as soon as possible to develop a plan to ensure that your grade properly reflects the work that you have put in and your mastery of the subject.

### Homework (platform: TopHat)

(22% of your final grade) Embedded in the weekly text book readings will be the weekly homework assignment. These homeworks are designed to further engage you in the course material and prepare you for in-class activities and quizzes. Homeworks will be assigned on a regular schedule – each being opened on Friday and closed before class on Wednesday. You are responsible for completing the homework assignments before the end date. Once an assignment closes, it will not reopen. Further information and instructions will be posted in Canvas and discussed in class.

There will be 12 assigned homeworks. **The lowest homework grade will be dropped.** If you need to miss more than one homework for reasons outside of your control, you should communicate with your instructor as soon as possible to develop a plan to ensure that your grade properly reflects the work that you have put in and your mastery of the subject.

### Human Disease Project

(10% of your final grade) Your group will investigate a topic related to human health and share with the class in a final presentation. This is a group project and it will be evaluated based on the application of background knowledge to the description of the topic, presentation, and group work. Specific guidelines, deadlines, and more details will be discussed in class and posted on Canvas.

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of Turnitin.com page service is subject to the Usage Policy and Privacy Pledge posted on the Turnitin.com site.

### ◆Use of Notes and Recording Devices in the Classroom◆

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussions, and/or activities without the advanced written permission of the instructor. Our live zoom review sessions will be recorded and shared with enrolled students

The materials I make available to you are my intellectual property. You are welcome to use the notes and recordings that I provide for your own private use. Posting my lecture notes, slides, quizzes, exams, practice questions, homeworks, answer keys or lecture recordings to ANY website without my express written permission is a violation of the academic integrity code. This includes all note-sharing websites including Coursehero, Studyblue.com, Koofers.com, etc. Any student caught sharing my intellectual property (lecture notes, slides, quizzes, exams, lecture recordings, etc) will be charged with a breach of academic integrity.

#### ◆Email Communication◆

Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address. To forward e-mail sent to your University account, go to <http://accounts.pitt.edu>, log into your account, click on Edit Forwarding Addresses, and follow the instructions on the page. Be sure to log out of your account when you have finished. (For the full E-mail Communication Policy, go to [www.bc.pitt.edu/policies/policy/09/09-10-01.html](http://www.bc.pitt.edu/policies/policy/09/09-10-01.html).)

#### ◆Academic Integrity◆

Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity, from the February 1974 Senate Committee on Tenure and Academic Freedom reported to the Senate Council, will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the quiz or exam will be imposed. View the complete policy at [www.cfo.pitt.edu/policies/policy/02/02-03-02.html](http://www.cfo.pitt.edu/policies/policy/02/02-03-02.html).

#### ◆Disabilities Resources and Services◆

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disabilities Resources and Services, 140 William Pitt Union, (412) 648-7890/(412) 383-7355 (TTY), as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

#### ◆Course Etiquette◆

1. Kindness. Please be kind and respectful to everyone in our community. Disrespectful behaviors will not be tolerated and will be reported to the Office of Student Conduct for mediation.
2. Email etiquette. Emails should include a descriptive subject, a greeting, and a closing with your name if you expect a response ☺
3. Zoom. Occasionally our class will meet through the Zoom online conference system. We will adopt the same rules and norms as in a physical classroom (take notes; participate by asking and answering questions; wear classroom-ready clothing). For everyone's benefit, join the course in a quiet place. Turn on your video if you are able and comfortable. Mute your microphone unless you are speaking. Close browser tabs not required for participating in class. This form of learning will be somewhat new to all of us, and success will depend on the same commitment we all bring to the physical classroom.

### ◆Tentative Course Schedule◆

The following is a rough outline of the topics to be covered.

#### Overview

Date	Module	Module Assignments
W 9/1	1: Course intro and Themes in Biology	Group activity 1
W 9/8	2: What food should I be eating? (biomolecules)	Module 2 Homework Group activity 2 Module 2 quiz
W 9/15	3. When will the pandemic end? (viruses & cells)	Module 3 Homework Group activity 3 Module 3 quiz
W 9/22	4. How can I live forever? (MolBio & cell division)	Module 4 Homework Group activity 4 Module 4 quiz
W 9/29	5. What determines skin color? (Tissues & Skin)	Module 5 Homework Group activity 5 Module 5 quiz
W 10/6	No class	HD Project topics
W 10/13	6. What do probiotics do? (Digestive)	Module 6 Homework Group activity 6 Module 6 quiz
W 10/20	7. What type of exercise should I do? – 1 (Muscle)	Module 7 Homework Group activity 7 Module 7 quiz
W 10/27	8. What type of exercise should I do? – 2 (Cardio)	Module 8 Homework Group activity 8 Module 8 quiz
W 11/3	9. Is the air in Pittsburgh killing me? (Respiration)	Module 9 Homework Group activity 9 Module 9 quiz HD Project outline
W 11/10	10. How can diabetes be prevented? (Endocrine)	Module 10 Homework Group activity 10 Module 10 quiz
W 11/17	11. Do vaccines cause autism? (Immune)	Module 11 Homework Group activity 11 Module 11 quiz
W 12/1	12. How does caffeine keep me awake? (Nervous)	Module 12 Homework Group activity 12 Module 12 quiz
W 12/8	13. What is a 3-parent baby? (Reproductive)	Module 13 Homework Group activity 13 Module 13 quiz
W 12/15	Group project: viewing	Group project due

## Detailed View

Module	Date	Course activity	Graded assignments & platform
1	W 9/1	In-class overview, themes in biology In-class Group activity 1 (sci news)	Group activity 1 due (TopHat)
2	W 9/8	In-class biomolecule review In-class Group activity 2 (biomolecules)	Module 2 Homework due (TopHat) Group activity 2 due (TopHat)
(admin)	F 9/10	<i>Add/Drop Ends</i>	
2	M 9/13		Module 2 Quiz due (biomolecules; Canvas)
3	W 9/15	In-class cell review In-class Group activity 3 (cells)	Module 3 Homework due (TopHat) Group activity 3 due (TopHat)
(admin)	F 9/17	<i>Extended Drop Ends</i>	
3	M 9/20		Module 3 Quiz due (cells; Canvas)
4	W 9/22	In-class MolBio & Cell division review In-class Group activity 4 (CellDiv & MolBio)	Module 4 Homework due (TopHat) Group Activity 4 due (TopHat)
(admin)	F 9/24	<i>Grade Option Deadline (to change to S/NC)</i>	
4	M 9/27		Module 4 Quiz due (CellDiv & MolBio; Canvas)
5	W 9/29	In-class Tissues & Skin review In-class Group activity 5 (Tissues & Skin)	Module 5 Homework due (TopHat) Group activity 5 due (TopHat)
5	M 10/4		Module 5 Quiz due (Tissues & Skin; Canvas)
(admin)	W 10/6	<i>No class</i>	
(HD)	W 10/6		HD project topic choices due (Canvas)
6	W 10/13	In-class Digestion review In-class Group activity 6 (Digestion)	Module 6 Homework due (TopHat) Group activity 6 due (TopHat)
(admin)	F 10/15	<i>Fall Break – no classes</i>	
6	M 10/18		Module 6 Quiz due (Digestion; Canvas)
7	W 10/20	In-class Muscle & ATP review In-class Group activity 7 (Muscle & ATP)	Module 7 Homework due (TopHat) Group activity 7 (TopHat)
7	M 10/25		Module 7 Quiz due (Muscle & ATP; Canvas)
8	W 10/27	In-class Cardiovascular review In-class Group activity 8 (Cardiovascular)	Module 8 Homework due (TopHat) Group activity 8 due (TopHat)
(admin)	F 10/29	<i>Monitored Withdrawal Deadline</i>	
8	M 11/1		Module 8 Quiz due (Cardiovascular; Canvas)
9	W 11/3	In-class Respiration review In-class Group activity 9 (Respiration)	Module 9 Homework due (TopHat) Group activity 9 due (TopHat)
(HD)	F 11/5		HD project outlines due (Canvas)
9	M 11/8		Module 9 Quiz due (Respiration; Canvas)
10	W 11/10	In-class Endocrine review In-class Group activity 10 (Endocrine)	Module 10 Homework due (TopHat) Group activity 10 due (TopHat)
10	M 11/15		Module 10 Quiz due (Endocrine; Canvas)
11	W 11/17	In-class Immune review In-class Group activity 11 (Immune)	Module 11 Homework due (TopHat) Group activity 11 due (TopHat)
11	M 11/22		Module 11 Quiz due (Immune; Canvas)
12	W 12/1	In-class Nervous review In-class Group activity 12 (Nervous)	Module 12 Homework due (TopHat) Group activity 12 due (TopHat)
12	M 12/6		Module 12 Quiz due (Nervous; Canvas)
13	W 12/8	In-class Reproductive review In-class Group activity 13 (Reproductive)	Module 13 Homework due (TopHat) Group activity 13 due (TopHat)
13	M 12/13		Module 13 Quiz due (Reproductive; Canvas)
(HD)	T 12/14		HD project presentation due (Canvas)
(HD)	W 12/15	In-class HD project peer review	HD project peer review due (Canvas)