

Biology 2 Human Biology Fall 2021 Weekly Schedule 11

Lectures: Mon, Wed, Fri (11:30 AM-12:35 PM)

X-Hours: Tues (12:15 PM-1:05 PM)

Text: None required

Course Web Site: <http://canvas.dartmouth.edu/>

Faculty: Professor Lee A. Witters

Teaching Assistants: Fatema Begum 22 and Michelle Kim 22

<u>Day/Date</u>	<u>Class Type</u>	<u>Subject</u>
Mon/Sept 13	Lecture 1	Human Biology: Varying Portraits of a Human Life
Tues/Sept 14	X-hour	Bio2: How You Can Learn & What You Want To Learn Practice Quiz posted 1 PM; due Wed, Sept 15, 10 AM
Wed/Sept 15	Lecture 2	Chemistry of Life I
Fri/Sept 17	Lecture 3	Chemistry of Life II
Sat/Sept 18	Quiz #1 (Lectures 1-3) posted 11 AM; due Mon, Sept 20, 11 AM	
Mon/Sept 20	Lecture 4	Structure & Function of Cells
Wed/Sept 22	Lecture 5	Cell Metabolism and Energy I
Fri/Sept 24	Lecture 6	Cell Metabolism and Energy II
Sat/ Sept 25	Quiz #2 (Lectures 4-6) posted 11 AM; due Mon, Sept 27, 11 AM	
Mon/Sept 27	Lecture 7	The Nucleic Acids: DNA & RNA
Wed/Sept 29	Lecture 8	Chromosomes/ Cellular Reproduction
Fri/Oct 1	Lecture 9	Human Genetics I
Sat/ Oct 2	Quiz #3 (Lectures 7-9) posted 11 AM; due Mon, Oct 4, 11 AM	
Mon/Oct 4	Lecture 10	Human Genetics II
Wed/Oct 6	Lecture 11	The Human Genome: Genetic Diagnosis and Engineering
Fri/Oct 8	Lecture 12	Cancer: A Genetic Disease
Sat/ Oct 9	Quiz #4 (Lectures 10-12) posted 11 AM; due Mon, Oct 11, 11 AM	
Mon/Oct 11	Lecture 13	Sex, Gender and Reproduction I
Wed/Oct 13	Lecture 14	Sex, Gender and Reproduction II

Fri/Oct 15	Lecture 15	Human Development, Birth & Aging
Sat/ Oct 16	Quiz #5 (Lectures 13-15) posted 11 AM; due Mon, Oct 18, 11 AM	
Mon/Oct 18	Lecture 16	The Endocrine Glands: Whence Our Hormones
Tues/Oct 19	X-hour (Lecture 17) Insulin @ 100: The Pancreatic Islets & Diabetes Mellitus	
Wed/Oct 20	Lecture 18	Muscles, Bones & Joints
Fri/Oct 22	Lecture 19	Urinary System: Kidneys & Bladder
Sat/ Oct 23	Quiz #6 (Lectures 16-19) posted 11 AM; due Mon, Oct 25, 11 AM	
Mon/Oct 25	Lecture 20	Digestive System: Our 2 nd “Outside”
Tues/Oct 26	X -Hour (Lecture 21) Why Do We Eat?	
Wed/Oct 27	Lecture 22	Malnutrition, Obesity & Anorexia Nervosa
Fri/Oct 29	Lecture 23	Neurologic System and Disease
Sat/ Oct 30	Quiz #7 (Lectures 20-23) posted 11 AM; due Mon, Nov 1, 11 AM	
Mon/Nov 1	Lecture 24	Human Microbiome/ Infectious Diseases
Wed/Nov 3	Lecture 25	The Immune System
Fri/Nov 5	Lecture 26	Two Pandemics: HIV (pre-recorded) & COVID-19
Sat/ Nov 6	Quiz #8 (Lectures 24-26) posted 11 AM; due Mon, Nov 8, 11 AM	
Mon/Nov 8	Lecture 27	The Lung: Respiratory Physiology & Diseases
Wed/Nov 10	Lecture 28	Circulation: Blood & Cardiovascular System
Fri/Nov 12	Lecture 29	Hypertension and Atherosclerosis
Mon/Nov 15	Quiz #9 (Lectures 27-29) posted 11 AM; due Wed, Nov 17, 11 AM	

Course Structure, Format, Expectations and Help

MUST READING!!

(along with “Tips for Success in Biology 2” and “Study Strategies for Success”)

1. **This fall term offering of Biology 2, Human Biology, will be taught “live” in the classroom (not offered remotely unless there is a change in College policies or personal circumstance).** Each of these class sessions will be recorded (Panopto) and posted shortly after the session on the Canvas site. There will be weekly group office hours conducted via Zoom each Saturday (9-10 AM); individual “in-person” office hours (Mon-Fri; variable schedule TBA weekly) can be scheduled via Calendly with Professor Witters. In addition, the course TAs, Michelle Kim '22 and Fatema Begum '22, will hold weekly review sessions Friday evenings (times/location TBA) “live” and will be available for 1-on-1 tutoring.
2. **It absolutely essential that EVERYONE in the class adhere to all College policies regarding COVID (and keep updated on any changes) both in and out of our classroom including masking (review an accompanying document on classroom masking policy), distancing/group gathering limits (as required), monitoring for symptoms and testing appointments. DO NOT COME TO CLASS IF YOU HAVE NOT ADHERED TO THESE AND DO NOT COME TO CLASS IF YOU HAVE ANY SYMPTOMS OF ILLNESS NO MATTER HOW MINOR.** A classroom exposure puts me (an older faculty member) at risk, as well as my near-by grandchildren (who are not vaccinated), others in the classroom & potentially those in other areas in the LSC. **Such exposure may mean isolation for all of us, including me, making my office in the LSC inaccessible for class preparation and/or remote teaching (which would occur with mandatory isolation). All lectures are being recorded and all course assessments are all on-line this term.**
3. **Consult the course schedule for the dates of class sessions and their content.** Note that we will be using some of the X-hours for course lectures in order to accommodate all of the material. **Our first X-hour on Tuesday, September 14** will be for two purposes: (1) To review the features/resources of the course and (2) To present a primer as to how to approach this course and your learning over the term. Two other X-hours will be used for lectures (17 & 21). This initial X-hour will be followed by a practice quiz (doesn't count toward grade) to familiarize you with the formats we will use.
4. **Your numerical course grade will be determined by on-line weekly quizzes administered in the open book/notes mode.** They will be made available through the Canvas site posted every Saturday at 11 AM. You will have 48 hours to complete them (i.e due Monday, 11 AM). Material for the quizzes will be drawn entirely from the prior week's lectures (3-4 lectures per quiz); the “Quick Review” slides indicate the topics to be covered. The quizzes will consist of 15 multiple choice, multiple answer, matching questions or true/false questions (each worth 1 point; 135 course points for all 9 quizzes). You will be allowed 1 attempt (45 min) and will see your incorrect answers at the end of your attempt. **Note: *the quiz will disappear at the submission deadline even if you are in middle of taking it, so plan ahead in terms of its completion.*** The correct answers & explanations will be revealed right after the submission deadline.

STUDY IN ADVANCE OF YOUR ATTEMPT IS HIGHLY ENCOURAGED AND NECESSARY FOR SUCCESS. While the open book/notes mode applies to these quizzes, you **MAY NOT** consult anyone else, whether a fellow student or any other person either verbally or in writing. You will be allowed to **DROP YOUR LOWEST QUIZ GRADE, BUT YOU MUST COMPLETE** all 9 quizzes to pass the course, irrespective of your score on each. **If there are circumstances that you feel make you unable to complete/submit the quiz in the time frame indicated, you MUST make me aware IN ADVANCE** of the posting of the quiz, so we can discuss. **There are no midterms or final exam in this course.**

In addition to these quantitative assessments, each student will have a chance to influence her/his **actual letter grade** by what I term **“course engagement”**. By this, I mean, is the student a **visible, active & curious participant** in the course throughout the term (not just towards the end of the course) in the classroom, in group/individual office hours, in working with the TAs 1-on-1 and/or in their weekly review sessions, or in helping us all by asking questions/comments on-line on our web site (Slack)? **I particularly pay attention to how your individual efforts contribute to the learning of your fellow classmates.** Such an assessment will not, in general, cause a major adjustment in a letter grade (and only serve to raise a grade, not lower one), but could well influence “borderline” letter grade assignments, though “engagement”, in my experience, invariably results in better performance on course assessments, as well.

In accordance with the general guidelines of the Biology Department, a passing performance in this course demands both satisfactory completion of all quizzes and the achievement of greater than or equal to 50% of total course points (effectively, 60 of 120 points, as everyone gets to drop one quiz) **In the past two offerings of this course, the course median grade has been B+.** There are no pre-determined “cut-offs”, save that everyone who earns at least 90% of possible points (effectively 108) will receive “some kind of A” (A or A-). **In the preparation for and in the taking of quizzes, adherence to the Academic Honor Principle, as detailed in the Student Handbook and at <https://student-affairs.dartmouth.edu/policy/academic-honor-principle> is expected. Violations of the Honor Principle will be promptly reported to the appropriate Deans.** See #9 below for more details.

4. For all weeks I will hold **daily individual office hours, location and format TBA. Hopefully we can hold them in my office, 122 LSC, though remote via Zoom may be necessary. These hours will be held Monday to Friday; weekly times/mode TBA; 20 min appointments; schedule with Calendly.** I am also willing to meet with **individual students (by appointment at other times)** which can be arranged by e-mailing me. **Also I will hold weekly group office hours on Sat AM (9-10) via Zoom (use our “universal URL” on the syllabus page; you can drop-in any time during this interval and will be admitted from a waiting room.** In addition to helping with your course material, I am happy to discuss “non-course business” or simply to get to know you better during individual hours. My goal is to have everyone succeed in this course AND at Dartmouth and I am anxious to get to know you and to help you in any way I can.

5. Our **course TAs**, Michelle Kim '22 and Fatema Begum '22 (both Bio 2 “alumnae”!), will be helping in class organizing questions submitted via Slack during the lecture and will monitor Slack on the web site. They will lead **class review sessions every Friday evening** (times/locations TBA) and will be available for one-on-one tutoring. They will be attending every class (meet & greet them!) helping with fielding questions during the lecture and will available by e-mail.

6. Our **course web site** uses **Canvas** as the learning management tool (<http://canvas.dartmouth.edu>). On Day One of the course, please set up your profile/e-mail contact information, as I will be using this mode to communicate with you during the course (click on ‘Account’ in sidebar; then both ‘Profile’ and “Settings”).

On Day One, also take a tour of the Canvas site to see how it is organized. The site is organized with a ‘Syllabus’ page (which has several links to general course information/ course aids, including a link to Calendly and Zoom address for Saturday group office hours), a ‘Calendar’, a page devoted to course topics (each of which, in turn, contains lecture notes, PP slides, links to lecture recordings & to some movies), a link to all “Panopto” lecture recordings, a link to ‘Slack’ which we will use for Q&A/discussions (more on that later), a ‘Quizzes’ section (where each weekend’s quiz will be posted), a “Course Aids & Help Documents’ section that has valuable tips about learning in STEM courses & ‘Quick Review’ summary slides of each lecture and a ‘Grades’ section. There is also a ‘Chat’ section that we might use for text chats, as needed/scheduled, during the term.

I STRONGLY encourage the viewing of the Powerpoint files posted on this site on your computer in the 'Presentation' mode (the animation and color can be very helpful); some also like to print these out. They are all up-loaded already to our Canvas site, along with notes for each lecture (as .pdfs); both could be subject to revision prior to each week to update any new information.

7. Poll Everywhere Audience Response System

This term we will also be using, on occasion, a learning element, Poll Everywhere. This platform is an interactive program that allows extended faculty-student engagement, providing, among other things, platforms for asking/answering questions. You will be able to use it with your laptop, pad or phone. We will have a demo to show you how this works and how we will use it during our first scheduled X-hour. You can answer questions either through your phone, laptop or the [PollEverywhere app](#)

8. **Students desiring individual help should see me first,** rather than go to the Academic Skills Center. In the past, when the course TAs were overburdened, I have been able to identify students who are helpful. *I encourage everyone to first work with the course TAs; both are extremely knowledgeable and will be attending every lecture this year (so they are up-to-date on course content).*). **I also encourage all to reach out to the Teaching Science Fellows** who can help you “learn how to learn science” aside from Bio2 course-specific information. E-mail them to set up an appointment (addresses on their web site (<https://sites.dartmouth.edu/teachingsciencefellows/>)).

9. Dartmouth Academic Honor Principle

The Dartmouth College Student Handbook states: "Fundamental to the principle of independent learning are the requirements of honesty and integrity in the performance of academic assignments, both in the classroom and outside. Dartmouth operates on the principle of academic honor, without proctoring of examinations. Any student who submits work which is not his or her own, or who commits other acts of academic dishonesty, violates the purposes of the College and is subject to disciplinary actions, up to and including suspension or separation.

There are a number of situations in which a student in Biology 2 might find her/himself tempted to violate the Academic Honor Principle. Review that Principle at: <https://students.dartmouth.edu/judicial-affairs/policy/academic-honor-principle>

These situations include (but are not limited to) the following:

- a) Quizzes can be completed in the ‘open book/open notes’ mode (accessing any source of written information), **but MUST be completed without ANY communication with ANYONE else either verbally or in writing.** The answers that you provide must be entirely your own work.
- b) Any form of submission or presentation of work, in any form, that is not the student's own without acknowledgement of the source, violates the Academic Honor Principle (<https://students.dartmouth.edu/judicial-affairs/policy/academic-honor-principle>). Students are responsible for the information found in the Sources: Their Use and Acknowledgement, at <https://writing-speech.dartmouth.edu/learning/materials/sources-and-citations-dartmouth>
- c) Honesty is the foundation of the academic pursuit of knowledge. **In recognition of this, I will not overlook any violations of the Academic Honor Principle.** Indeed, the Faculty Handbook of Dartmouth College states explicitly that College Faculty is obligated to report potential violations of the Academic Honor Principle to the Dartmouth College Committee on Standards.

10. **Religious Observances** Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me early to discuss appropriate accommodations.

11. Commitments Toward Your Success in This Course

As course designer and instructor, I am committed to your successful achievement of your goals in this course. I also understand that you may encounter challenges during the term. Resources are available to help you. These may include:

- **Accessibility support.** Students requesting disability-related accommodations and services for Bio2 are encouraged to schedule a meeting with me as early in the term as possible. This conversation will help to establish how your accommodations will be implemented in this course and what role Student Accessibility Services (SAS) or its [Testing Center](#) may play in assisting. In order for accommodations to be authorized, students are required to register with SAS ([Getting Started with SAS webpage; student.accessibility.services@dartmouth.edu](#); 603-646-9900) and to request an accommodation email be sent to me in advance of the need for an accommodation. If students have questions about whether they are eligible for accommodations, they should contact the SAS office. All inquiries and discussions will remain confidential. It is **very important that we then continue to communicate** over the term to assure that your needs are being met. Receiving accommodations **does NOT** relieve you of the responsibility of communicating with me about any deviations from course requirements **BEFORE the fact**.
- **Mental health and wellbeing support.** The academic environment (and this pandemic environment) at is challenging, our terms are intensive, and classes are not the only demanding part of your life. There are a number of resources available to you on campus to support your wellness, including: your undergraduate dean (<http://www.dartmouth.edu/~upperde/>), the Counseling Center (<http://www.dartmouth.edu/~chd/>), and the Student Wellness Center (<http://www.dartmouth.edu/~healthed/>). The student-led [Dartmouth Mental Health Union](#) and their Peer Support Program in Collis (and other programs) may additionally be helpful to you.
- **Financial support.** Some courses may require purchases of course materials, though this is likely not the case for Bio 2. If help needed, consult with your dean, review [Financial Aid Policies and Resources](#), and keep me informed.
- **Support around issues of sex or gender-based harassment, sexual assault, and their after-effects.** The Sexual Respect Website (sexual-respect.dartmouth.edu) provides information on your rights and obligations with regard to sexual respect and resources that are available to all in our community. Please keep in mind that if you report prohibited conduct as detailed in the Sex and Gender-based Misconduct policy, I am obliged to share your concern with the Title IX Coordinator.

Please make me aware of anything that will hinder your success in this course. I will help and I will put you in touch with others who can help even more. The earlier I am aware of issues, the more I can do to assist you.

12. No textbook is required for this course. In my experience, many Human Biology texts are outlandishly expensive, not up-to-date and lacking in many of the things we will cover in this course. The materials I am supplying you (lecture notes, lecture PP slides, summary slides (“Quick Review”), lecture recordings, study tips) are adequate for your success in the course.