

Biology 2 Human Biology Winter 2021 Weekly Schedule D/DX

Lectures: Mon, Wed, Fri (Schedule D; 11:45 AM-12:50 PM)

X-Hours: Tues (Schedule D-X; 12:30 PM-1:20 PM)

Mode of Delivery: Synchronous (all sessions via Zoom being recorded)

Text: None required

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

Faculty: Professor Lee A. Witters

Teaching Assistants: Sunny Tang 21 and Antonio Vitor De Souza 21

<u>Day/Date</u>	<u>Class Type</u>	<u>Subject</u>
Fri/Jan 8	NO CLASS	Course Survey published; complete by Sun/Jan 10
Mon/Jan 11	Lecture 1	Human Biology: Varying Portraits of a Human Life
Tues/Jan 12	X-hour	Bio2: How You Can Learn & What You Want To Learn Practice Quiz posted 1 PM; due Wed, Jan 13, 10 AM
Wed/Jan 13	Lecture 2	Chemistry of Life I
Fri/Jan 15	Lecture 3	Chemistry of Life II
Sat/Jan 16	Quiz #1 (Lectures 1-3) posted 10 AM; due Mon, Jan 18, 10 AM	
Mon/Jan 18	Optional	A Personal MLK Remembrance
Tues/Jan 19	X-Hour (Lecture 4)	Structure & Function of Cells
Wed/Jan 20	Lecture 5	Cell Metabolism and Energy I
Fri/Jan 22	Lecture 6	Cell Metabolism and Energy II
Sat/ Jan 23	Quiz #2 (Lectures 4-6) posted 10 AM; due Mon, Jan 25, 10 AM	
Mon/Jan 25	Lecture 7	The Nucleic Acids: DNA & RNA
Wed/Jan 27	Lecture 8	Chromosomes/ Cellular Reproduction
Fri/Jan 29	Lecture 9	Human Genetics I
Sat/ Jan 30	Quiz #3 (Lectures 7-9) posted 10 AM; due Mon, Feb 1, 10 AM	
Mon/Feb 1	Lecture 10	Human Genetics II
Wed/Feb 3	Lecture 11	The Human Genome: Genetic Diagnosis and Engineering
Fri/Feb 5	Lecture 12	Cancer: A Genetic Disease
Sat/ Feb 6	Quiz #4 (Lectures 10-12) posted 10 AM; due Mon, Feb 8, 10 AM	

Mon/Feb 8	Lecture 13	Sex, Gender and Reproduction I
Wed/Feb 10	Lecture 14	Sex, Gender and Reproduction II
Fri/Feb 12	Lecture 15	Human Development, Birth & Aging
Sat/ Feb 13	Quiz #5 (Lectures 13-15) posted 10 AM; due Mon, Feb 15, 10 AM	
Mon/Feb 15	Lecture 16	The Endocrine Glands: Whence Our Hormones
Tues/Feb 16	X-hour (Lecture 17) The Pancreatic Islets & Diabetes Mellitus	
Wed/Feb 17	Lecture 18	Muscles, Bones & Joints
Fri/Feb 19	Lecture 19	Urinary System: Kidneys & Bladder
Sat/ Feb 20	Quiz #6 (Lectures 16-19) posted 10 AM; due Mon, Feb 22, 10 AM	
Mon/Feb 22	Lecture 20	Digestive System: Our 2 nd “Outside”
Tues/Feb 23	X -Hour (Lecture 21) Why Do We Eat?	
Wed/Feb 24	Lecture 22	Malnutrition, Obesity & Anorexia Nervosa
Fri/Feb 26	Lecture 23	Neurologic System and Disease
Sat/ Feb 27	Quiz #7 (Lectures 20-23) posted 10 AM; due Mon, March 1, 10 AM	
Mon/Mar 1	Lecture 24	Human Microbiome/ Infectious Diseases
Wed/Mar 3	Lecture 25	The Immune System
Fri/Mar 5	Lecture 26	Two Pandemics: HIV & COVID-19
Sat/ Mar 6	Quiz #8 (Lectures 24-26) posted 10 AM; due Mon, March 8, 10 AM	
Mon/March 8	Lecture 27	The Lung: Respiratory Physiology & Diseases
Tues/March 9	X Hour (Lecture 28) Circulation: Blood & Cardiovascular System	
Wed/March 10	Lecture 29	Hypertension and Atherosclerosis
Dates TBD	Quiz #9 (Lectures 27-29)	

Course Structure, Format, Expectations and Help

MUST READING ON DAY ONE OF COURSE

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

1. **This winter term offering of Biology 2, Human Biology will be taught remotely via Zoom.** All lectures and X-hours will be synchronous (i.e. “live”) in the D/D-X time slots. Each of these class sessions will be recorded and posted shortly after the session on the Canvas site. There will also be daily weekday group office hours conducted via Zoom (day/times TBA); individual or small group office hours can be scheduled by communication with Professor Witters. In addition, the course TAs, Sunny Tang '21 and Antonio Vitor De Souza '21, will hold weekly review sessions Friday evenings (times TBA) via Zoom and will be available for 1-on-1 tutoring.
2. **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, January 12** 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. Four other X-hours will be used for lectures (#4, 17, 21 & 28). 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.
3. **Your numerical course grade will be determined by weekly quizzes administered in the open book/notes mode.** They will be made available through the Canvas site posted every Saturday at 10 AM. You will have 48 hours to complete them (i.e. due Monday, 10 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, true/false or fill in the blank 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. While the open book/notes mode applies to these quizzes, you **MAY NOT** consult anyone else, whether a fellow student or any other person. 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 intermittently or towards the end of the course) in the “classroom”, in group/individual office hours, in working with the TAs 1-on-1 and in their weekly review sessions, and/or in helping us all by asking questions on-line on our web site (Slack) and/or offering comments? **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, 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, assuming everyone drops 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 **group office hours (Monday to Friday; times TBA)**. I am also willing to meet with **individual students (or smaller groups) by appointment at other times** which can be arranged by e-mailing me. In addition to helping with your course material, I am happy to discuss “non-course business” or simply to get to know you better. 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**, Sunny Tang ‘21 and Antonio Vitor De Souza ‘21, will be helping in class organizing questions submitted during the lecture via the ‘Chat’ function on Zoom and will monitor Slack on the web site. They will lead **class review sessions every Friday evening** via Zoom (times 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 and displays Zoom URLs for all sessions), 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 ‘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 can 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 will be up-loaded prior to each class, typically the week before the lectures for the coming week.

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 while “Zooming”. 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 communication with ANYONE else**. 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 with disabilities, including chronic diseases, learning/performance challenges, and/or mental health issues are encouraged to discuss with me appropriate supports that might be helpful to them. **Please do this as early as you are aware.** In order to formalize any disability-related accommodations you are entitled to receive, you **must consult** the Student Accessibility Services (SAS) office in Carson Hall 125 or by phone: 646-9900 or email: Student.Accessibility.Services@Dartmouth.edu. Please link to [Student Accessibility Services](#) for more information. You have my cooperation and support in assuring equitable access and all inquiries and discussions will remain confidential. **Once SAS has authorized services, students must share a formal communication from SAS with me in a conversation during office hours (i.e. not sufficient simply to e-mail me the authorization).** 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 Dartmouth and, for some of you, in your homes 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 Late Night Solace Program in Collis 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, Zoom recordings, study tips) are adequate for your success in the course.