BIO 11 Spring 2026

Emerging Infectious Diseases: How Microbes Rule the World

Class meets in LSC 201: M, W, F 11:30 AM - 12:35 PM. The x-hour is Tu 12:15 – 1:05 PM and will be used throughout the term.

Professor
Mary Lou Guerinot 325 LSC Office Hours: Mon 12:45–2:00 PM
Tues 3:00 to 5:00 PM
Fri 10:00–11:00 AM
In Person or on ZOOM

Peer Tutor
Sofia Galarza

Overview

Biology 11 is an introductory course for all students interested in pursuing study in biology. There are several offerings of Bio 11 each year. Each is designed to provide a synthetic overview of the life sciences and to introduce the fundamental ideas, processes, and theories on which the modern life sciences are built. Different offerings of Bio 11 have different themes that the instructors have chosen to introduce fundamental concepts and develop a perspective on the life sciences. Bio 11 has two main goals. The first is to stimulate interest in the science of life. The second is to introduce you to problem solving and encourage critical thinking in the life sciences.

Readings

Required:

Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus That Caused It. By Gina Kolata. You can get it on Amazon.com.

Readings from the primary literature will be assigned throughout the term and will be available via Canvas within the Lecture folders (most easily accessed through the course calendar page).

Canvas

We have set up a Canvas site for Bio 11. The specific reading assignments for each class, as well as PowerPoint presentations, will be available.

Meeting Places

The regular class periods will be in person in LSC 201, with Zoom as a back-up in case of emergencies or closures. All class periods will be recorded and the videos will be made available via Panopto on Canvas (see Consent to Recording section below).

Office hours will take place over Zoom and in person during the times noted above. For Zoom, please use Dartmouth's Zoom account, as this meeting place is limited to Dartmouth users only. A dedicated Zoom link for the class is available via Canvas.

Consent to Recording

(1) Consent to the recording of the course:
a) By enrolling in this course, you affirm your understanding that this course and associated group meetings involving students and the instructor, may be recorded within any digital platform used to offer instruction for this course;
b) You further affirm that the instructor owns the copyright to their instructional materials, of which these recordings constitute a part, and distribution of any of these recordings in whole or in part without prior written consent of the instructor may be subject to discipline by Dartmouth up to and including separation from the College;
c) You authorize Dartmouth and anyone acting on behalf of Dartmouth to record your participation and appearance in any medium, and to use your name, likeness, and voice in connection with such recording; and
d) You authorize Dartmouth and anyone acting on behalf of Dartmouth to use, reproduce, or distribute such recording without restrictions or limitation for any educational purpose deemed appropriate by Dartmouth and anyone acting on behalf of Dartmouth.
(2) Consent to one-on-one recordings
By enrolling in this course, you affirm that you will not under any circumstance make a recording in any medium of any one-on-one meeting with the instructor without obtaining the prior written consent of all those participating, and you understand that if you violate this prohibition, you will be subject to discipline by Dartmouth up to and including separation from the College, as well as any other civil or criminal penalties under applicable law.

Assessment of Your Academic Performance

We will have 4 quizzes during class period. The value for each quiz will vary based on the proportion of material covered. Quiz 1 covers 3 classes and is worth 10% of your final grade. Quiz 2 covers 4 lectures and is worth 15%. Quizzes 3 & 4 each cover 5 classes and are each worth 20%. Quizzes will focus on the topics covered in the preceding lectures. However, note that as the course progresses, we will take opportunities to link each class topic with earlier ones; these connections will be reflected in the quizzes. The Final Exam covers 6 lectures and the movie (Contagion) and includes a course-long review of major concepts, as well as integration and synthesis of all course material. The Final is worth 30%. The final 5% of your grade will be based on your digital poster.

Academic Honesty

Academic honesty is essential. The following is quoted directly from the Dartmouth College Student Handbook: "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." The detailed description of the Dartmouth Honor Principle is available at https://policies.dartmouth.edu/policy/academic-honor-principle. Please read the Honor Principle carefully; ***you*** are responsible for knowing and

understanding the Honor Principle and adhering to its letter and spirit. Any violations of the Honor Principle in this course must be referred to the Committee on Standards and can result in your suspension for multiple terms, or, in the most extreme cases, separation from the College.

Religious Holidays

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 either of us as soon as possible, or before the end of the second week of the term—at the latest, to discuss appropriate adjustments. Dartmouth has a deep commitment to support students' religious observances and diverse faith practices.

Your Health

We recognize that the academic environment at Dartmouth is challenging, that our terms are intensive, and that 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 (https://students.dartmouth.edu/undergraduate-deans/), Counseling and Human Development (https://student-affairs.dartmouth.edu/news/2015/12/counseling-and-human-development), and the Student Wellness Center (https://students.dartmouth.edu/wellness-center/). We encourage you to use these resources as you deem appropriate and to come to talk with either of us if you have any concerns. It is important to take care of yourself throughout the term.

Accommodations:

Students requesting disability-related accommodations and services for this course are required to register with Student Accessibility Services (SAS; Apply for Services webpage; https://students.dartmouth.edu/student-accessibility/students/where-start/apply-services; 1-603-646-9900) and to request that an accommodation email be sent to me in advance of the need for an accommodation. Then, students should schedule a follow-up meeting with either of us to determine relevant details such as what role SAS may play in accommodation implementation. This process works best for everyone when completed as early in the quarter as possible. If students have questions about whether they are eligible for accommodations or have concerns about the implementation of their accommodations, they should contact the SAS office. All inquiries and discussions will remain confidential.

COVID-19 Information

Attendance:

You are expected to attend class in person unless you have made alternative arrangements due to illness, medical reasons, or the need to isolate due to COVID-19. For the health and safety of our class community, please: **do not attend class when you are sick**, nor when you have been instructed by Student Health Services to stay home. All classes will be recorded and you will be able to view recordings of class in Canvas (at the Panopto button) if you are unable to attend.

Title IX

At Dartmouth, we value integrity, responsibility, and respect for the rights and interests of others, all central to our Principles of Community. We are dedicated to establishing and maintaining a

safe and inclusive campus where all have equal access to the educational and employment opportunities Dartmouth offers. We strive to promote an environment of sexual respect, safety, and well-being. Please refer to https://policies.dartmouth.edu/policy/dartmouth-college-policy-sexual-and-gender-based-misconduct. In its policies and standards, Dartmouth demonstrates unequivocally that sexual assault, gender-based harassment, domestic violence, dating violence, and stalking are not tolerated in our community.

The Sexual Respect Website (https://sexual-respect.dartmouth.edu) at Dartmouth provides a wealth of information on your rights with regard to sexual respect and resources that are available to all in our community. Please note that, as faculty members, we are obligated to share disclosures regarding conduct under Title IX with Dartmouth's Title IX Coordinator. Confidential resources are also available, and include licensed medical or counseling professionals (e.g., a licensed psychologist), staff members of organizations recognized as rape crisis centers under state law (such as WISE), and ordained clergy (see https://eoatix.dartmouth.edu/support-services/sexual-respect-and-title-ix/resources). Should you have any questions, please feel free to contact Dartmouth's Title IX Coordinator and deputies if appropriate).

Daily Schedule

Mar 30	Mon	**What is an infectious disease?** History of Microbiology
Apr 1	Wed	**Epidemiology I**
Apr 3	Fri	**Epidemiology II**
Apr 6	Mon	**Review for Quiz #1**
Apr 8	Wed	**Quiz #1 (covering lectures from Mar 30-Apr 3)**
Apr 10	Fri	**Basics I**
Apr13	Mon	**Basics II**
Apr15	Wed	**Bacteria, archaea, viruses**
Apr 17	Fri	**Immunology and Vaccine basics**
Apr 20	Mon	**Global Climate change: Cholera**
Apr 21	Tues	**Review for Quiz #2**
Apr 22	Wed	**Quiz #2 (covering lectures from Apr 10-Apr 17).**
Apr 24	Fri	**No class**
Apr 27	Mon	**Ecological Considerations: Lyme Disease**
Apr 28	Tues	**Evolution: Myxomatosis**
Apr 29	Wed	**TB**
May 1	Fri	**TB**
May 4	Mon	**Influenza**
May 5	Tues	**Review for Quiz 3**
May 6	Wed	**Quiz #3 (covering lectures from Apr 20-May 1).**
May 8	Fri	**Ebola**
May 11	Mon	**Discussion of the book *Flu* by Gina Kolata**
May 13	Wed	**SARS I**
May 15	Fri	**SARS II**
May 18	Mon	**Measles**
May 19	Tues	**Review for Quiz #4**
May 20	Wed	**Quiz #4 (covering lectures from May 4-15**
May 22	Fri	**HIV I**
May 25	Mon	**Memorial Day no class**
May 26	Tues	**Contagion**
May 27	Wed	**HIV II**
May 29	Fri	**Contagion/Malaria**
June 1	Mon	**No Class**
June 2	Tues	**Malaria**
June 3	Wed	**Wrap Up**
	TBD	**Review Session**
Jun 7	Sun	**FINAL EXAMINATION 11:30 AM (covering lectures from May 18 – June 3 and a course overview)**