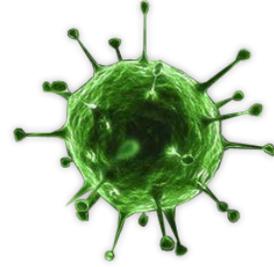


BIOLOGY 5240
VIROLOGY
Syllabus Fall 2017



Topics:

- Chpt. 1 Viruses and their importance
- Chpt. 3 Virus structure
- Chpt. 4 Virus transmission
- Chpt. 5 Attachment and entry of viruses into cells
- Chpt. 6 Transcription, translation, and transport
- Chpt. 7 Virus genome replication
- Chpt. 8 Assembly and exit of virions from cells
- Chpt. 10 Classification and nomenclature of viruses
- Chpt. 11 Herpes viruses (and other double-stranded DNA viruses)
- Chpt. 2 Methods used in virology
- Chpt. 14 Picornaviruses (and other plus strand RNA viruses)
- Chpt. 9 Outcomes of infection for the host
- Chpt. 15 Rhabdoviruses (and other minus strand RNA viruses)
- Chpt. 25 Virus vaccines
- Chpt. 15 Influenza virus
- Chpt. 17 Retroviruses
- Chpt. 18 Human immunodeficiency viruses
- Chpt. 26 Anti-viral drugs
- Chpt. 19 Hepadnaviruses (and other reverse-transcribing DNA viruses)
- Chpt. 21 Evolution of viruses
- Chpt. 22 Emerging viruses
- Chpt. 23 Viruses and Cancer
- Chpt. 24 Survival of infectivity
- Chpt. 27 Prions

Important Dates:

September 4th: Labor Day Holiday, No Class

November 22nd: First day of Thanksgiving Holiday, No Class

September 18th: Exam 1

October 9th: Exam 2

October 30th: Exam 3

November 20th: Exam 4

December 11th: Final Exam 3:30 – 5:20 pm

Instructor	Thayne Sweeten, Ph.D.
E-mail	<i>thayne.sweeten@usu.edu</i> (this is the best way to contact me)
Phone	435-919-1243
Office hour	Monday or Wednesday at 4:15 pm, after class, or by appointment
Required resources	Virology: Principles and Applications 2 nd edition by Carter and Saunders. Wiley and Sons publishing.
Lecture sessions	Monday/Wednesday: 3:00 – 4:15 pm

Course Goals

Among the smallest of microorganisms, viruses have an immense impact on the living world, yet it is questionable if they are even alive. This course will investigate all thing virus, from their mechanisms of infection and transmission to their structure and means of replication. Various virus types will be studied including retroviruses, herpesviruses, HIV, Influenza and emerging viruses. Viral methodologies, anti-viral drugs and vaccines will also be explore in this course designed to provide a foundational yet applicable knowledge of these microscopic “parasites”. Appreciation and understanding of viruses will be further enhanced by a study of select scientific articles relevant to the subject.

Requirements

Students are expected to attend all lectures read the chapter covered in the lecture **prior** to coming to class. There are also scientific papers to read with associated questions to answer and discuss in class. This is a challenging course with a lot of interesting material to cover. Study time and effort are required.

Class Website

Course material such as the syllabus, slides, test scores and other information will be posted on the Utah State University Canvas web site provided for the course. Canvas will also be used for course announcements. To log in to Canvas go to online.usu.edu (no “www”). Your username is your Banner username (your “A” number) and your password is your BANNER password. You should see BIOL 4750 as one of your courses. Just click on that and you will be at the course home page. Most lectures will be recorded using Panopto and posted on the course website. If you have problems viewing these recordings please contact the USU IT Service Desk:

Phone: 435.797.HELP (4357)

Toll Free: 1.877.878.8325

Email: servicedesk@usu.edu

Exams

Four exams will be given during the semester approximately every 2 ½ weeks. The exams will cover the contents of the chapters covered since the last exam and may include pertinent information from earlier chapters as well. The dates of these exams are listed above under “important dates”. A comprehensive final exam will be given as well. Exam questions are primarily short-answer.

Reading Assignments

There will be approximately 7 scientific papers assigned as reading assignments with associated questions during the semester. Each reading assignment/questions will have a specific due date. These assignments will be posted and submitted on Canvas.

Grading

There will be **no** extra credit or special projects to improve your grade. Students can discuss exam scores from midterm exams and assignments up until the last office hour of the semester, after then only the final exam will be discussed. Your final grade will be determined in the following manner:

- | | |
|---------------------------------|------------------|
| • Reading assignments | 150 points |
| • 4 exams worth 100 points each | 400 |
| • Final comprehensive exam | <u>200</u> |
| | 750 total points |

Grade breakdown

Percentage	Grade
100 – 93%	A
< 93 – 90%	A-
< 90 - 87%	B+
< 87 – 83%	B
< 83 – 80%	B-
< 80 – 77%	C+
< 77 - 73%	C
< 73 - 70%	C-
< 70 - 67%	D+
< 67 - 60%	D
< 60%	F

Unacceptable Classroom Behavior

Behavior that disrupts the classroom environment will be discouraged.

1. Once class has started, **cell phones should be silenced** and no ring tones or conversations are permitted. Use of laptop computers is permitted only for purposes related to the class.

2. Once class has started, **talking among students is strongly discouraged**. If you need to talk, please leave the class and conduct your conversation outside. If students persist in talking among themselves during class, they will be asked to visit my office and receive a written notice. If talking continues, students will be asked to leave the room and possibly the class so that other students can benefit from the limited amount of class time available. I take this seriously!

Withdrawal Policy and "I" Grade Policy

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

Honor Code Policy

As stated in The Student Code, "Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to reinforce the higher level of conduct expected and required of all Utah State University students." Upon admission to the university, you agreed to abide by this Honor Code by signing the Honor Pledge, which reads: "I pledge, on my honor, to conduct myself with the foremost level of academic integrity." Complete academic honesty is expected in this course. Cheating on exams or plagiarism on written assignments will result in a failing grade and may result in further action according to University policy.

Accommodation for Disabilities

The Americans with Disabilities Act states: "Reasonable accommodation will be provided for all persons with disabilities in order to ensure equal participation within the program. If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center (797-2444), preferably during the first week of the course. Any request for special consideration relating to attendance, pedagogy, taking of examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative format, large print, audio, diskette, or Braille."

Grievance Process

Students who feel they have been unfairly treated...may file a grievance through the channels and procedures described in the

Student Code:

<http://www.usu.edu/studentservices/pdf/StudentCode.pdf#page=3> (Article VII. Grievances, pages 27-36).

Communications via email

Email is an official form of communication at USU. Any communication to you about this course will be to the email address you have listed in ACCESS as your preferred address. You are responsible for any information conveyed to you at that email address. To make sure that the university is using the email account you prefer, do the following:

- At the USU website, click on the link "MyUSU" at the top right of the page
- Under "Access" click on the link "Login to Access (Banner)"
- Log in using your A number and Password
- Click on "Personal Information"
- Click on "Update E-mail Addresses"
- Follow the short instructions to update your preferred email address

It is your responsibility to check your email account regularly.