Introduction to
Virology BISC 3893,
Summer 2020

Meeting place and times: (TBD). Tue/Wed/Thu 9:00-12:00 noon.

Course topics: An introduction to the significance of viruses as agents of disease, and as tools to understand basic life processes. The course will cover the structural and biochemical properties of viruses, viral replication strategies virus-cell interactions, viral pathogenesis and host immune reactions. Emphasis will be on animal viruses but the properties and replication strategies of prokaryotic and plant viruses will also be explored.

Instructor: Dr. Patricio I. Meneses
email: pmeneses@fordham.edu
Office Hours (Rose Hill office):
Tue and Wed, 1-3 PM, Thu 1-2:00 PM. Office Hours at other times by appointment only. Rose Hill Office: Rm. 160 Larkin Hall, 718-817-3640

Course page:
http://fordham.blackboard.com

Course prerequisites: Prerequisites: BISC 1404,
CHEM 1322.

Textbooks:

In class format, questions are strongly encouraged! Participation is an integral part of the course, and each class meeting will be a combination of lecture and discussion. Supplemental readings for a given meeting are available online from the course website, and will be a basis for the discussions. You are expected to read the designated text and supplemental readings in advance of the corresponding meeting and to participate in the discussions.

Grading: Midterm (x4): 70% Final: 20% Participation: 10% A = 94-100, A- = 91-93, B+ = 87-90 B = 83-86, B- = 80-82, C+ = 77-79, C = 73-76, C- = 68-72, D = 61-67, F <60
Exams will be a mixture of multiple choice, short answer and essay-type questions. The final will emphasize material covered during the last third of the course, but knowledge is cumulative.

Make-up exams are strongly discouraged; make-ups will be given only if arranged before the absence or if you have a note from a medical doctor or a Dean’s note. Make-ups will not duplicate regular exams and may be more difficult. To be fair to everyone in the class, there are no exceptions to this policy. Any academic integrity violation will result in an F for any one exam/violation.

Schedule of Topics Summer 2020
Note: This is a rough schedule of events; some topics may take more or less time than indicated.

Lesson Date Chapter Reading
1 30-Jun Introduction to virology 1 2 1-Jul Virus Architecture and nomenclature 2
3 1-Jul Eucaryotic Molecular Biology, Cellular Hurdles, and how viruses hijack host cells 3
4 8-Jul Mechanisms of viral entry and spread of infection in the body 4 5 8-Jul Host resistance to viral infection 5
9-Jul EXAM 1 6 9-Jul Epidemiology 6
7 14-Jul Laboratory Diagnosis of viral diseases and working with viruses in the research laboratory 7
8 14-Jul The history of medicine, clinical trials, gene therapy and xenotransplantation 17 9 15-Jul Polio and other enteroviruses 8 10 15-Jul influenza virus 9
20 29-Jul Infectious Molecules: Prions and Viroids 18 21 30-Jul Plant Viruses 19 22 30-Jul The Best for Last: Bacteriophages 20
4-Aug 8/4 FINAL TBD