

MICROBIOLOGY 402 - VIROLOGY
COURSE OUTLINE Spring 2020 CRN 22183

Instructor: Dr. Chris Upton; **Office:** Petch 213; **Phone:** 250-721-6507

Email: cupton@uvic.ca

Office Hours: Open (appointments as required)

Textbook: See CourseSpaces for suggestions

iClickers **Required:** available at bookstore **Or use iClicker Reef on Phone/tablet (\$15)**

Web site **See:** coursespaces.uvic.ca

TOPICS

- Introduction to viruses: History, characteristics, replication
- Virus particles: Structure
- Virus replication: Genome replication strategies
- Consequences of virus infection: Virus - host cell interactions
- Viruses and the immune system: Pathogenicity, virulence, disease, host defenses and vaccines
- Viruses with +ve sense RNA genomes: .. Polio, TMV, MS2, Rubella virus, coronaviruses
- Viruses with -ve ssRNA genomes: Rabies virus, flu virus
- Viruses with dsRNA genomes: Reoviruses, rotavirus
- Retroviruses: Oncogenes, HIV and AIDS
- Viruses with small DNA genomes: Parvoviruses, papillomaviruses
- Viruses with large DNA genomes: Adenoviruses, poxviruses, herpesviruses

The classroom periods are 1.5 hour in duration. To allow for interactive learning, it is expected that discussion of lecture material will ensue in each session. This will be encouraged and the lectures constructed in a way that facilitates open dialog. *iClickers are required.*

Students will be required to research one topic and prepare a short oral or on-line presentation.

Although brief lecture notes will be provided, attendance of lectures is expected.

5. Students are expected to be present for the midterm and final exams. Instructors may grant deferrals for midterm examinations for illness, accident, or family affliction, and students must provide appropriate documentation 48 hours after the midterm exam. The Department of Biochemistry and Microbiology considers i