

Some of the interesting Biology courses offered in Fall 2021:

Like water?

You can learn more here.

Clarkson™

Great Lakes Water Protection: The Laurentian Great Lakes contain 20% of the world's surface fresh water and serve both water supply and waste disposal services for over 33 million people. BY330/EV330 (3 cr.); UNIV, C1

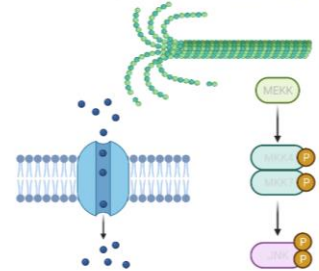
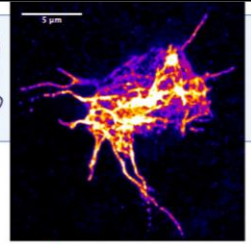
BY218 Cell Biology

3 credits, starting Fall 2021
Instructor: Dr Ginger Hunter (ghunter@clarkson.edu)

In this course, we will answer questions like:
How do cells function in healthy tissues?
What happens when the tissue develops disease?
How do we know?

Topics will include:
- signal transduction
- cell death
- cell migration
- cell cycle

Students will also learn research skills:
- searching for primary literature using pubmed
- interpreting primary data in literature
- discussing & presenting literature with peers



Have you ever wondered...



◦ How evolution has given rise to the incredible diversity of species on earth today?

◦ How understanding evolution helps healthcare providers to combat pandemic outbreaks and fight against antibiotic resistance?



◦ Why are ligers so awesome but tigers are not?

BY220 Intro to Evolution

3 credits, Fall 2021 Prof. Susan Bailey

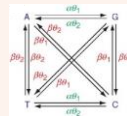


BY314/514 Bioinformatics

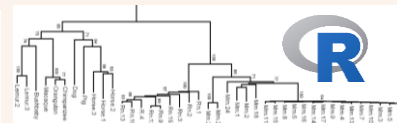
Lecture + computer lab, 4 credits, Prof. Susan Bailey

Learn to use R-script and other software to obtain and analyze nucleotide and protein sequence data, perform sequence alignment, build molecular phylogenies, and test evolutionary models.

Now offered in the Fall!



Species	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Scorites	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Carenem	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Pazimehus	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Pharopisphus	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Brachinus armiger	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Brachinus hirsutus	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Aptinus	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C
Pseudomorph	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C	G	A	T	C



Stem Cells & Regenerative Medicine (BY488/588)

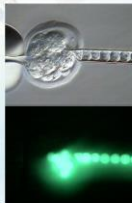
- Did you know that cloning of many animals including humans is now possible?
- Did you know that nearly any human organ can now undergo regeneration?
- Is it ethical to work with human Embryonic Stem Cells?
- What is the future of lab generated human organs?



Prof. Thomas Lufkin
tlufkin@clarkson.edu
Fall Semester (3 Credits) BY488/588

Curious about the biotechnology in your life?

- What is a transgenic?
- What is synthetic biology?
- How should we manipulate the human genome?
- Are you eating genetically engineered organisms?
- How can you improve health care and the world you live in?



Join us in BY486/586 Molecular Biotechnology



Fall 2021 – 3 credits
Instructor: Dr. Petra Kraus