

BIOL 313 Course Profile

The course description for BIOL 313 ([Principles of Ecology](#)) can be [found here](#).

Generally offered in: Winter semester

Prerequisite(s): Completion of at least 24 units (four full-course equivalents), including Biology 233 or any two of Biology 231, 241 and 243.

Antirequisite(s): None

Interview with Dr. Ariane Cantin

In your own words, can you give a brief summary of what this course is about?

Biology 313 is basically an introduction to ecology. We explore concepts from the individual all the way to the ecosystem. **It is a good way to get a broad picture of what the field of ecology is about** and look at many cool examples of its application in nature.

When we think of ecology, we first think about how individuals interact, leading to the process of natural selection and evolution. We then bring it all the way up to communities and population dynamics between different individuals, nutrient cycling, and landscape ecology.

What is the main skill you want students to take away from this course?

One of the main skills I want you to take away from this class is learning to do your own research. You read scientific literature, look at graphs and understand data in an ecological context. **You will learn to explain what you've done and relate it to the literature.**

What aspect of the course do you think students struggle with the most?

Students struggle with the writing part in the labs; these assignments are often a big step for most students. It's usually the first time **students ask a question, do their own science, and write about it**. Past students often say how much this step has helped them in future courses. It can be scary at first, but **it develops a very useful skill.**

What can students do to be successful in this course besides attending lectures?

Coming with an open mind and being willing to take part in the 'iterative' part of science. In this lab and the course, you will face situations where your experiment does not give you the results you were expecting. It is quite a shift in your mindset that your experiment won't give you significant results but that is still valid scientific information.

Does this course have a lab or tutorial component?

This class has a lab component.

What should students expect from the laboratory component of the course?

There are quite a few assignments, a lot of writing and teamwork. Students will get feedback from their TA and then will have to readjust from that feedback. Having an open mind to work with people will help in the lab component. The first few assignments are often different from what students are used to, so you should be ready to readjust. If these first few assignments do not end up giving you the grade you desire you should not freak out, you will get better, and your grades will catch up.

What do you think is the most effective way that students can prepare for an examination in the course?

Exams contain a lot of application problems. You will see concepts from the lecture in a new light, looking at how different variables come together instead of memorizing big definitions. **Students will have to rely on comprehension of topics for these exams.** When this class is online, exams are open book. When this class is in-person, exams are closed book.

Aside from the textbook and lecture notes, are there any other resources that you recommend students use?

No. Everything I say in the lecture is enough to complete the course. The textbook is a good resource to get an explanation that is different from mine. Coming to lecture, taking good notes (I'm a big proponent of taking notes), and the textbook is enough for this course.

If students are stuck on a topic, I am also a great resource. Students can come to talk to me during office hours. I'm really not that scary.

You are also in teams in this class, I recommend studying in teams (either the one you're assigned or a group of friends). Quizzing one another and explaining concepts to each other will help your understanding of concepts. It is not a physical resource, but it is one way to take your understanding to the next level.

Do you have any other advice for incoming students taking this course?

Do not procrastinate, schedule your time well. Keep up with the material throughout (although I would advise this for all courses). The material in Biology 313 builds on itself so it is important to understand the first part before you can move on and integrate it into something larger.

What is your favourite part about teaching this course?

I love that I get to present all the coolest examples of ecology (it is my field of study and what I like to research). Being able to explain and present all the cool examples of why nature is so fun is great. I also love the discussions I get to have with students.