

## ZOOL 581 Course Profile

The course description and Winter 2018 syllabus of Zoology 581, [Principles in Parasitism](#), can be found [here](#).

**Generally offered in:** Winter semesters

**Prerequisite(s):** CMMB 343, ZOOL 375 or ZOOL 401.

**Antirequisite(s):** None

*Interview with Dr. Constance Finney*

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

In this course, we explore parasitology in the context of ecosystems. This is not a medical parasitology course. We tackle the concept of parasitism, why it occurs, its evolution and what effects it has on hosts. We mainly focus on **understanding the life strategy of parasitism** using real world examples. The examples covered in labs are Canadian and Albertan-focused to showcase the work of local parasitologists and make students aware of their research and the parasites that can be encountered in our province or in other parts of the country.

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

By covering local parasites, I hope that students gain a better **understanding of the natural world directly around them** and how it affects them/they affect it. Through the labs, we want to strengthen students' **science literacy**, by teaching them how to process scientific articles and assess the quality of different sources of scientific information. This is really important as they will then be able to recommend or share this with friends and family and help limit the spread of bad science in the media. In lectures, we also spend a lot of time understanding experimental design, the resulting data and its interpretation. This year we'll be focusing less on the detailed morphology and lifecycles of specific parasites and more on fundamental concepts and how they are linked together.

### **Will a textbook be required for the class? If so, which?**

No, 'The art of being a parasite' book by Claude Combes is recommended but not required for this class. The lectures are very-much inspired by the book and the notes I'll provide are very comprehensive. I would only suggest purchasing the book if you feel you'll learn better by reading the extra detail. However, you will not need any information from the book that I have not provided in the lectures for your assignments.

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

**Terminology** in parasitology is complex. I highly recommend students reach out to me or one of our TAs whenever they are unclear about any of the language as soon as possible so the gaps in understanding

do not pile up. There will be various ways students can reach out ([outlined in a question below](#)), we're really happy to help and no question is ever too simple, please reach out when you need. Another aspect students tend to struggle with is **linking concepts**; getting to a higher level of understanding, beyond learning facts, and integrating them across different lectures and labs. Though lecture and lab contents are assessed separately, they do intertwine, and it's good for students to reflect on how the different parts of the course relate to each other.

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

The midterm will consist of a problem based on experimental design and data analysis. We will run a **practice session** in class beforehand, which should give students an idea of what to expect for the midterm. In the final, one part will be similar to the midterm and the other part will consist of **reading a scientific paper** and answering questions on it. We will also have practiced this in class before the final. The paper is always provided about a week ahead of the final, students can read through it and annotate it ahead of time.

### **Are there other resources that students can use besides the textbook and lecture notes?**

The lecture notes are already comprehensive. They are typed out documents including links with helpful videos. As additional resources, I highly encourage students to use the chat or raise their hand in class, and use the **discussion boards on D2L** that will be monitored by the TAs. Labs are also a good time to ask questions, including one hour where only the TAs (and not me) are present in case students are not comfortable asking certain questions while I'm around. Really do reach out to us whenever you feel the need, whenever you have any hesitation. We have two TAs this year, compared to the usual one, due to online delivery, so please use us as much as you can! A note on that is that emails can be quite overwhelming and can be missed so we would really appreciate if students can turn to the means listed above instead of emails to reach us.

### **Online delivery**

\* The features of the class could potentially differ from these responses as the format of the course is solidified.

**Will classes be in person or delivered online?**    **Online**

**Will lecture be by synchronous or asynchronous?**    **Synchronous and Asynchronous**

### **Additional comments:**

For this semester, I have been working on preparing **detailed documents** for each theme we cover in lectures, notes written out in a narrative manner rather than in a powerpoint format. Those documents will also include images and videos to help better understand the content. **The** document will be released a week in advance of the synchronous Zoom discussion we will have to go over the concepts covered. I will also indicate on D2L how much time it is expected students will need to spend going over the material in the documents. If students find themselves consistently spending considerably more time than I indicate,

they should reach out to me. There could be many reasons this is happening and it may be happening to more than one student. Honest communication is going to be key this semester so that we can all enjoy the course and for students to feel like they are able to show me their best work. The weekly synchronous lecture will allow us to go through concepts from the document posted on D2L through group work. If students struggle with the in class discussions, they should reach out to the TAs or me through one of the means we have in place for that.

**Will classes be recorded? No**

We will not be recording the labs or the in-class discussions. However, for the labs, students will be working on worksheets that they will be completing themselves, and we will post summary notes of the in class discussions on D2L.

**Will this course have a lab or tutorial component this Winter 2021 semester?**

Yes, it will have a lab.

**What will the laboratory component of the course look like? How has it been adjusted from previous years?**

The lab will still be 3 hours long, from 9 to 12 AM on Tuesdays but will be occurring via Zoom. That time will be **broken up into three blocks**, a one hour block for discussions around basic concepts with the TAs, a one hour block for discussions around concepts and thoughts for the particular lab with me and another hour block to work on worksheets while TAs are around if students have questions.

**What graded components will make up the class this semester?**

For every lecture document, there will be a **quiz** for students to assess their understanding of its contents. Students will be able to have multiple tries at the quizzes but should use their success as an indication of their understanding of the material.

For the lab component, students will be working on weekly worksheets which are graded. We will work on one together during the first lab so students have an understanding of what we are looking for. There is no lab exam but rather a final lab take home assignment that students will be working on for the whole semester. It will consist of writing a **critique**, where they will compare two to three written pieces in a topic in parasitology, assessing the presentation, reliability and impact of the data.

There will also be a **midterm and final exam** (what they entails is expanded in a question above). There will be two practice sessions to help students prepare for the types of exercises in the midterm/final. Both practice exercises will be graded to ensure students complete them, but with a minimal percentage.

## Extra questions

### Do you have any other advice for incoming students taking ZOOLOGY 581?

We are going to try to **be as flexible as possible** and we hope that students can be understanding as well. We are all experiencing higher than usual levels of stress and anxiety, especially with the new online format. As well, please **communicate** with our team with any concerns. If you are registered with Student Accessibility Services, or have a situation that impacts your ability to study, we will do our best to accommodate you but we only can do that if we know about the concerns. Finally, the earlier we know about an issue, the earlier we can provide support for it.

### Do you have any favourite aspect of teaching this course?

I really enjoy showing students the work that we do here in Canada. I get to showcase the work of friends and colleagues, important work that's not always recognized as such since parasites don't often make the news. I also really enjoy seeing students' enthusiasm for parasites when we do in class discussions.

### Are there any classes you would suggest to students if they really enjoyed this class?

There aren't any classes at UCalgary that I can think of but I highly recommend students who enjoy this class to pursue research projects in the field of parasitology. I will be inviting researchers from our university and within Canada to talk to the class. If a student is interested in completing a research project they should contact one of those professors or a professor from the Host Parasite Interactions network I am part of (<https://ucalgary.ca/host-parasite-interactions>). Projects include co-op positions, summer research projects or a 507, 528 or 530 project varying from clinical work, fundamental lab bench or bioinformatic research to science communication-related work. These are amazing opportunities, things which many students are not aware of, where you can get paid/get credit to have some fun in parasitology!

*This interview transcript was edited for clarity and brevity*