

COURSE SYLLABUS

COURSE TITLE:	BIOL 436 Animal Parasitology		
COURSE CODE:	29198	TERM:	T2 2020/2021
COURSE CREDITS:	3.0	DELIVERY:	Lecture & Practicum (Lab)
CLASS SECTION:	01	START DATE:	January 11 th 2021
CLASS LOCATION:	None - Remote delivery	LAB LOCATION:	None - Remote delivery
CLASS TIME:	8.30 to 9.50 am (T,TH)	LAB TIME:	1.30 to 5.20 pm (Tuesday)
WEBSITE:	Canvas		

Course Description

Deals with helminths, arthropods & protozoa of people, domestic and wild animals. Examples from these will be used to illustrate important concepts, including basic structure and function, life cycles, ecology, biogeography, individual and population level host-parasite-environment relationships, epizootiology and parasite control strategies.

Prerequisites

Prerequisite(s): BIOL 121 and 9 additional credit units of senior BIOL courses or permission of the instructor. **Note:** BIOL 302 is recommended.

Treaty Acknowledgement

As we engage in Remote Teaching and Learning, I would like to acknowledge that the Saskatoon campus of the University of Saskatchewan is on **Treaty Six Territory** and the **Homeland of the Métis**. We pay our respect to the First Nation and Métis ancestors of this place and reaffirm our relationship with one another. I would also like to recognize that some may be attending this course from other traditional Indigenous lands. I ask that you take a moment to make your own Land Acknowledgement to the peoples of those lands. In doing so, we are actively participating in reconciliation as we navigate our time in this course, learning and supporting each other.

Instructor & Course Coordinator

Contact Information:

Professor Neil Chilton (Course Coordinator/Instructor); E-mail: neil.chilton@usask.ca

Instructor Profile:

Dr. Chilton is a regular faculty member/professor in the Department of Biology. He teaches and conducts research in biology. His specialized areas of teaching and research are animal parasitology. Website = <https://research-groups.usask.ca/chilton/>

Learning Outcomes

By the completion of this course, students will be expected to:

1. demonstrate a depth in understanding of parasitology, which includes exploring the life cycles and diversity of parasites in different animal phyla, and how parasites are transmitted to hosts,
2. analyze and solve realistic case studies in medical and veterinary parasitology, and
3. enhance their communication skills (e.g., writing and oral presentations in parasitology using the scientific literature).

Note: The University of Saskatchewan Learning Charter is intended to define aspirations about the learning experience that the University aims to provide, and the roles to be played in realizing these aspirations by students, instructors and the institution. A copy of the Learning Charter can be found at: <https://teaching.usask.ca/about/policies/learning-charter.php>

Course Website & Supplementary Resources

Students are required to read the course syllabus.

Dr. Chilton will record lectures (that will be delivered live on Tuesday and Thursday mornings beginning at 8.30 am) and will subsequently make them available on the BIOL 436 course page of CANVAS. Supplementary materials, including laboratory exercises, will also be placed CANVAS. Dr. Chilton may provide a copy of his lecture notes on CANVAS to you as a courtesy. He will endeavour to have the lecture notes posted sometime in advance of the lectures; however, he will not guarantee this.

The rules regarding to copyright (page 6) apply to these video recordings and to the lecture notes. Hence, recordings and lecture notes are only intended for the use of students registered in this class, and you are not permitted to post any documents of videos from this course online or to distribute these materials to other people, unless you have written permission from your Professor Chilton.

Recommended Technology for Remote Learning

Students are reminded of the importance of having the appropriate technology for remote learning. The list of recommendations can be found at <https://students.usask.ca/remote-learning/tech-requirements.php>.

Required Textbooks

none

Class Schedule

Lecture class information:

Lectures will be delivered live (i.e. synchronous activity) beginning at 8.30 am on Tuesdays and Thursdays. You will receive links for these lectures using Meets on WebEx. Students are expected to attend (i.e. be online) and be on time for all scheduled lectures.

Lecture topics (include, but not necessarily in the following order): What is parasitism, parasite evolution; terminology and general concepts; host specificity; major parasite groups and their life cycles [protozoa, platyhelminths, nematodes, acanthocephalans & arthropods], site selection by parasites; environmental effects on parasite life cycles; effect of climate change on parasite distribution; and manipulation of hosts by parasites.

Laboratory class schedule and information:

Students are expected to attend (i.e. be online) and be on time for all scheduled labs. Students are advised to consult with Prof. Chilton when they are too ill to attend the lab period or are facing extenuating personal circumstances.

Week	Dates	Laboratory classes (Synchronous activity)
1	Jan 12	Lab 1: Meet & greet session, and information on seminar presentations
2	Jan 19	Lab 2: The Amazing World of Parasites (Report 1 due before 11 pm Jan 19th)
3	Jan 26	Lab 3: Parasite Morphology & Classification (Report 2 due before 5 pm Feb 1st)
4	Feb 2	Lab 4: The Danger of Parasites (Report 3 due before 5 pm Feb 8th)
5	Feb 9	Lab 5: Case Study - Parasite monsters (Report 4 due before 5 pm Feb 12th)
6	Feb 16	NO CLASSES - Winter Midterm Break
7	Feb 23	<i>No lab scheduled</i>
8	Mar 2	Mid-term Exam
9	Mar 9	<i>No lab scheduled</i> PowerPoint presentations for weeks 10 and 11 must be submitted before 5 pm on March 11th.
10	Mar 16	Lab 6: Seminar Presentations (part 1) All seminar abstracts due before 5 pm March 15th.
11	Mar 23	Lab 6 (continued): Seminar Presentations (part 2)
12	Mar 30	Lab 7: Parasite Scene Investigations (PSI) (Report 5 due before 5 pm April 5th)
13	Apr 6	<i>No lab scheduled</i> The Final exam will be distributed on April 6th and is due before 5 pm April 12th
14	Apr 13	<i>No lab scheduled</i>

Last day to withdraw from course without academic penalty is Wednesday April 7th.

Grading and Assessment Scheme

Midterm exam	20
Lab reports	25
Seminar Presentation, participation & written abstract	25
Final exam	30
Total	100%

Note: A penalty of 5% per day will apply to assignments not handed in on time.

Evaluation Components

Midterm Exam:

Value: 20% of final course grade
Date/Time: March 2nd 2021/ 1.30 pm
Length: 1 hour
Format: Fill-in-the-blank questions, short-answer and long-answer questions
Description: Based on lecture material prior to the date of the midterm exam.

Laboratory Reports:

Value: 25% of final course grade (5 reports, each worth 5%)
Date: see Laboratory Class Schedule
Format: Details will be provided during class.

Seminar Presentation, participation and written report (abstract) of seminar presentation:

Value: 25% of final course grade - This assignment (60 marks) consists of three components: the presentation (45 marks), an abstract (10 marks) and participation (5 marks), the latter of which is determined by the number and quality of questions asked by each student. The marks for the seminar presentation are determined using five criteria: content (20 marks), slide quality (10 marks), delivery style (8 marks), timing (3 marks) and responses to student questions (4 marks).

Date: See Laboratory Class Schedule

Format: Oral presentation, written abstract and student questions

Description: Each student will prepare and record a 15-17 minute oral presentation (using PowerPoint). The choice of topic will be based on a list of parasites and recently published journal articles prepared by Dr. Chilton. Choice of topic must be approved by Dr. Chilton or the Teaching Assistant. No two students will have the same topic. Recorded presentations must be supplied to Prof. Chilton before 5 pm on March 11th. The recorded presentations will be played in random order during the labs in week 10 and 11. Following each presentation, there will be a 5 min question period during which students will be invited to ask questions of the presenter. **Attendance by students for all seminar presentations is mandatory.** Students must prepare a written abstract (250-500 words) of their presentation.

Final Exam:**Value:** 30% of final course grade**Date:** The exam will be distributed on April 6th (2021) and is due before 5 pm on April 12th (2021).**Format:** The take-home final exam is to be completed during the student's own time and is based on the course materials. Instructions will include the desired format as well as a guide for grading. All students are expected to work independently on this exam and are not to seek any assistance from any other person, in or outside of this class. This includes any input, including proofreading or editing. Any final exam not completed 100% by the student will be assigned a grade of zero.

University of Saskatchewan Grading System

Students in BIOL 436 are reminded that the University has established a grading system to be used in all of its courses. Information on literal descriptors for grading at the University of Saskatchewan (reproduced below) can be found at:

<http://students.usask.ca/current/academics/grades/grading-system.php>

Scheduling of Exams

Midterm Exam:

The Midterm exam must be written on the date scheduled. In the event that a student is absent from the **midterm exam** through no fault of their own due to a medical emergency, death in the family, or other valid reasons, documentation must be provided explaining the absence, to assist in the determination of whether permission will be granted for the student to write a deferred mid-term exam. Students absent for the Mid-Term Lecture Exam must advise Prof, Chilton by email through Canvas and initiate arrangements for writing a Deferred Mid-Term Exam, **within 3 working days of the missed exam**, in order to avoid being assigned a grade of zero for the exam.

Final Exam:

The exam will be distributed on April 6th and is due before 5 pm on April 12th. Students should therefore avoid making prior travel, employment, or other commitments for this period. If a student is absent from the **final exam** through no fault of their own for medical or any other valid reason, **they must apply to the Dean's Office of the College in which they are registered for an opportunity to write a Deferred Final Exam, within 3 working days of the missed exam**. Documentation must also be provided to explain the absence from the final exam. Deferred exams may utilize a different format than the regular exam, at the sole discretion of the instructors.

Students are encouraged to review all examination policies and procedures:

<http://students.usask.ca/academics/exams.php>

Student Feedback

Students will be encouraged to meet with the instructor to review their performance.

Copyright

Course materials are provided to you based on your registration in a class, and anything created by your professors and instructors is their intellectual property, unless materials are designated as open education resources. This includes exams, PowerPoint/PDF slides and course notes. Additionally, other copyright-protected materials created by textbook publishers and authors may be provided to you based on license terms and educational exceptions in the Canadian Copyright Act (see <http://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>).

Before you copy or distribute others' copyright-protected materials, please ensure that your use of the materials is covered under the University's Fair Dealing Copyright Guidelines available at <https://library.usask.ca/copyright/general-information/fair-dealing-guidelines.php>. For example, posting others' copyright-protected materials on the open web is not covered under the University's Fair Dealing Copyright Guidelines, and doing so requires permission from the copyright holder.

For more information about copyright, please visit <https://library.usask.ca/copyright/index.php> where there is information for students available at <https://library.usask.ca/copyright/students/rights.php>, or contact the University's Copyright Coordinator at <mailto:copyright.coordinator@usask.ca> or 306-966-8817.

Integrity in a Remote Learning Context

Although the face of teaching and learning has changed due to covid-19, the rules and principles governing academic integrity remain the same. If you ever have questions about what may or may not be permitted, ask your instructor. Students have found it especially important to clarify rules related to exams administered remotely and to follow these carefully and completely.

The University of Saskatchewan is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Student Conduct & Appeals section of the University Secretary Website and avoid any behaviour that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All students should read and be familiar with the Regulations on Academic Student Misconduct (<https://secretariat.usask.ca/student-conduct-appeals/academic-misconduct.php>) as well as the Standard of Student Conduct in Non-Academic Matters and Procedures for Resolution of Complaints and Appeals (<https://secretariat.usask.ca/student-conduct-appeals/academic-misconduct.php#IXXIAPPEALS>)

For more information on what academic integrity means for students see the Academic Integrity section of the University Library Website at: <https://library.usask.ca/academic-integrity#AboutAcademicIntegrity>

You are encouraged to complete the Academic Integrity Tutorial to understand the fundamental values of academic integrity and how to be a responsible scholar and member of the USask community - <https://library.usask.ca/academic-integrity.php#AcademicIntegrityTutorial>

Examinations with Access and Equity Services (AES)

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Access and Equity Services (AES) if they have not already done so. Students who suspect they may have disabilities should contact AES for advice and referrals at any time. Those students who are registered with AES with mental health disabilities and who anticipate that they may have responses to certain course materials or topics, should discuss course content with their instructors prior to course add / drop dates. In order to access AES programs and supports, students must follow AES policy and procedures. For more information or advice, visit <https://students.usask.ca/health/centres/access-equity-services.php>, or contact AES at 306-966-7273 or aes@usask.ca.

Students registered with AES may request alternative arrangements for mid-term and final examinations. Students must arrange such accommodations through AES by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by AES.

For information on AES services and remote learning please visit <https://updates.usask.ca/info/current/accessibility.php#AccessandEquityServices>

Student Supports

Academic Help for Students

The University Library offers a range of learning and academic support to assist USask The University Library offers a range of learning and academic support to assist USask undergrad and graduate students. For information on specific services, please see the Learning page on the Library web site <https://library.usask.ca/support/learning.php>.

- Remote learning support information <https://students.usask.ca/study/remote-learning.php>
- Remote learning tutorial https://libguides.usask.ca/remote_learning
- Study skills materials for online learning <https://libguides.usask.ca/studyskills>
- A guide on netiquette, principles to guide respectful online learning interactions <https://teaching.usask.ca/remote-teaching/netiquette.php>

Teaching, Learning and Student Experience

Teaching, Learning and Student Experience (TLSE) provides developmental and support services and programs to students and the university community. For more information, see the students' web site <http://students.usask.ca>.

Financial Support

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact Student Central (<https://students.usask.ca/student-central.php>).

Aboriginal Students' Centre

The Aboriginal Students' Centre (ASC) is dedicated to supporting Aboriginal student academic and personal success. The centre offers personal, social, cultural and some academic supports

to Métis, First Nations, and Inuit students. The centre is also dedicated to intercultural education, bringing Aboriginal and non-Aboriginal students together to learn from, with and about one another in a respectful, inclusive and safe environment. Students are encouraged to visit the ASC's Facebook page (<https://www.facebook.com/aboriginalstudentscentre/>) to learn more.

International Student and Study Abroad Centre

The International Student and Study Abroad Centre (ISSAC) supports student success and facilitates international education experiences at USask and abroad. ISSAC is here to assist all international undergraduate, graduate, exchange and English as a Second Language students in their transition to the University of Saskatchewan and to life in Canada. ISSAC offers advising and support on matters that affect international students and their families and on matters related to studying abroad as University of Saskatchewan students. Please visit students.usask.ca or updates.usask.ca for more information.

College Supports

Students in Arts & Science are encouraged to contact the Undergraduate Student Office and/or the Trish Monture Centre for Success with any questions on how to choose a major; understand program requirements; choose courses; develop strategies to improve grades; understand university policies and procedures; overcome personal barriers; initiate pre-career inquiries; and identify career planning resources. Contact information is available at: <http://artsandscience.usask.ca/undergraduate/advising/>
