

COURSE SYLLABUS

COURSE TITLE:	BIOL 436 Animal Parasitology		
COURSE CODE:	80021	TERM:	T1 2019/2020
COURSE CREDITS:	3.0	DELIVERY:	Lecture & Practicum (Lab)
CLASS SECTION:	01	START DATE:	September 4 th 2019
CLASS LOCATION:	room 123 Biology Bldg	LAB LOCATION:	room 122 Biology Bldg
CLASS TIME:	11.30 to 12.20 am (M,W,F)	LAB TIME:	1.30 to 5.20 pm (Mon.)
WEBSITE:	via Blackboard		

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.

Prerequisite(s): BIOL 121 and 9 additional credit units of senior BIOL courses or permission of the instructor. **Note:** BIOL 302 (formerly BIOL 401) is recommended.

Learning Outcomes

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

1. have an understanding of parasitological concepts
2. explore the life cycles and diversity of parasites of different animal phyla
3. understand how parasites are transmitted to hosts, and
4. enhance their communication skills (e.g., writing and oral presentations).

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: http://www.usask.ca/university_secretary/LearningCharter.pdf

More information on the Academic Courses Policy on course delivery, examinations and assessment of student learning can be found at:
http://www.usask.ca/university_secretary/council/academiccourses.php

Instructor & Course Coordinator

Contact Information:

Professor Neil Chilton	room 320.7 CSRB Bldg	306-966-4407
Course Coordinator/Instructor	neil.chilton@usask.ca	

Required Textbooks

none

Downloads

These will be available as appropriate through the course Blackboard. The only document that you are required to download and read is the course syllabus. **Please note that I may provide you with lecture notes as a courtesy.** You are not required to download or print these notes. While I will endeavor to have the lecture notes posted sometime in advance of the lectures; however, I will not guarantee this.

Class Schedule

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; manipulation of hosts by parasites.

Laboratory class schedule: Students are expected to attend and be on time for all scheduled labs.

WEEK day	LAB TOPIC
1 Sept 4	No lab
2 Sept 9	Introduction (seminar preparation)
3 Sept 16	Parasite diversity & identification (Report 1 due Friday Sept 27th)
4 Sept 23	Parasite games & monsters (Report 2 due Friday Oct 4th)
5 Sept 30	Parasitology University Challenge (Mid-term exam review)
6 Oct 7	Mid-term exam (2 hr)
7 Oct 14	No lab - Holiday (Thanksgiving)
8 Oct 21	Parasites and humans (a case study) (Report 3 due Wednesday Oct 23rd)
9 Oct 28	Seminar presentations - week 1
10 Nov 4	Seminar presentations - week 2
11 Nov 11	Fall Midterm Break – no classes
12 Nov 18	Parasite Scene Investigations (PSI)
13 Nov 25	Parasitology playoffs (Final exam review)
14 Dec 2	No lab

* **Note: All seminar abstracts due Oct 25th**

Last day to withdraw from course without academic penalty is Friday November 15th.

Grading Scheme

Midterm exam	20
Lab reports	15
Seminar Presentation, participation & written abstract	25
Final exam	40
Total	100%

Evaluation Components

Midterm Exam:

Value: 20% of final course grade
Date: See Laboratory Schedule
Length: 2 hours
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. Electronic devices are not allowed.

Final Exam:

Value: 40% of final course grade
Date: Consult Final Exam Schedule
Length: 3 hours
Format: Fill-in-the-blank questions, short-answer and long-answer questions
Description: The exam is comprehensive in that it will cover all lecture material. However, material delivered after the midterm exam will be emphasized. Calculators and all other electronic devices are not allowed.

Laboratory Reports:

Value: 15% of final course grade (3 reports, each worth 5%)
Date: see Laboratory Schedule
Format: Details will be provided during class.

Seminar Presentation, participation and written report of seminar presentation:

Value: 25% of final course grade
Date: See Laboratory Schedule
Format: Oral presentation, written abstract and student questions
Description: The Each student will prepare and present an oral presentation on the ecology, evolutionary history, taxonomy or any other aspect of the biology of one parasite species or a group of closely-related species. Each presentation will be of 15-17 mins. duration (using Powerpoint), followed by a question period from primarily the other students. **Attendance by all students for all seminar presentations is mandatory.** The instructor or lab demonstrator must approve your choice of topic for the presentation. In late September, a list will be placed on paws to indicate the topics selected by students for their presentation. This is to avoid two students speaking on the same parasite(s).

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

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

Students must bring their current University of Saskatchewan student card to all exams and be prepared to present it for verification purposes. Entry into certain campus buildings where exams may be held, also requires a valid student card.

It is forbidden for students to utilize in any way during an exam, any electronic device (e.g., cell phone, dictionary, palm pilot, translator, etc.). This includes calculators because these are not required for any exam.

Midterm and final examinations, and the lab exam, must be written on the date scheduled. Final examinations may be scheduled at any time during the examination period in December 2019; students should therefore avoid making prior travel, employment, or other commitments for this period.

In the event that a student is absent from the **midterm exam** through no fault of his/her 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 their instructor in person or by telephone (not by email) 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.

If a student is absent from the **final exam** through no fault of his or her own for medical or any other valid reason, **he/she must apply to the Dean's Office of the College in which he/she is 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://www.usask.ca/calendar/exams&grades/examregs/>

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 other 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.

Recording Lectures

Recording video and/or audio of your class lectures without permission from your instructor is not allowed, as stated in the University of Saskatchewan [Academic Courses Policy](#). One exception to this rule is that "[a] student may record lectures without such permission only if the [Access and Equity Services office](#) has approved this accommodation for the student. The instructor will be notified of this accommodation. Such recordings would not be shared, and would be deleted at the conclusion of the class." (Academic Courses Policy, [Section 5.6 – Responsibilities of students](#))

If you do have recordings from your class lectures, it is not permitted for you to post those recordings online or to distribute the recordings to other people unless you have permission from your instructor to do so.

Student Feedback

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

Attendance Expectations for Laboratory Classes

Students are expected to attend all scheduled lab periods. Students are advised to consult their instructor when they are too ill to attend the lab period or are facing extenuating personal circumstances.

Integrity Defined (from the Office of the University Secretary)

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 behavior 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 (http://www.usask.ca/university_secretary/honesty/StudentAcademicMisconduct.pdf) as well as

the Standard of Student Conduct in Non-Academic Matters and Procedures for Resolution of Complaints and Appeals (http://www.usask.ca/university_secretary/honesty/StudentNon-AcademicMisconduct2012.pdf)

For more information on what academic integrity means for students see the Student Conduct & Appeals section of the University Secretary Website at:
http://www.usask.ca/university_secretary/pdf/dishonesty_info_sheet.pdf

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. In order to access AES programs and supports, students must follow AES policy and procedures. For more information, check <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.

Student Supports

Student Learning Services

Student Learning Services (SLS) offers assistance to U of S undergraduate and graduate students. For information on specific services, please see the SLS web site <https://library.usask.ca/studentlearning/>.

Student and Enrolment Services Division

The Student and Enrolment Services Division (SESD) focuses on providing developmental and support services and programs to students and the university community. For more information, see the SESD web [site http://teaching.usask.ca/](http://teaching.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 in their international education experiences at the U of S and abroad. ISSAC is here to assist all international undergraduate, graduate, exchange and English as a Second Language students and their families in their transition to the U of S and Saskatoon. ISSAC offers advising and support on all matters that affect international students and their families and on all matters related to studying abroad. Please visit students.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/>

Prepared by Prof. Neil Chilton