

SPRING, 2014

BIOLOGY 4800: PARASITISM

Lecture: Tu, Th, - 10:50 - 12:05, B-730
Lab: Friday 1:00-3:50, WE-2092
Instructor: Dr. Cam Goater
WE-1048 Biological Sciences
cam.goater@uleth.ca

General format: The first 50% of the course provides an introduction to parasite immunobiology and parasite biodiversity. This section focuses on life-cycle variation, functional morphology, and general biology of selected taxa. The second places the phenomenon of parasitism into an ecological and evolutionary context.

Course website: All course documents will be posted on the BIOL4800 Moodle page at <https://moodle.uleth.ca/>

Required textbook: Goater, T.M., Goater, C.P. and GW. Esch. 2014. Parasitism: the diversity and ecology of animal parasites. Cambridge University Press. (available in bookstore)

Other material: Goater, C.P. 2014. Laboratory Manual. (PDF available on website)

Grading Scheme:	Weekly quizzes	20
	Midterm/Lab Exam 1 (1-3 Mar.)	27.5
	Midterm/Lab Exam 2 (21-23 Apr.)	27.5
	Term paper	15
	Oral presentation	10

Grading summary: The two Moodle exams will be similar in format, combining material from laboratory and lecture components. The first exam will include material from the first 14 lectures and the first 4 labs. The second will focus on material from the second half of the course and the last 4 labs. Details regarding exam format will be provided in class. The 13 weekly, in-class quizzes will cover general questions taken from selected chapters of Goater *et al.* (2014). Your final score on this component will be calculated from the cumulative scores of your top ten quizzes. Details and deadlines regarding the Term Paper and Oral Presentation components will be provided in class and on the website.

Course grades: The grade for the course will be based on the final mark obtained by addition of all marks earned for the lecture and lab portions of the course in the proportions given above. The following definitions and percent values are those that will be used in determining final letter grades:

A+	excellent	91% to 100%	C+	satisfactory	67% to 69%
A	excellent	85% to 90%	C	satisfactory	63% to 66%
A-	excellent	80% to 84%	C-	satisfactory	60% to 62%

B+	good	77% to 79%	D+	poor	55% to 59%
B	good	73% to 76%	D	minimal pass	50% to 54%
B-	good	70% to 72%	F	failure	<50%

Policy on missed exams:

The two exams can be written at any time during a 3-day window. Thus, missing an exam should occur only under exceptional circumstances. In the rare event of a missed exam, you must notify me before the exam time by email. If you unexpectedly miss an exam and if you provided prior notification and documentation (e.g., a letter from a physician), then your grade will be calculated by prorating marks earned on other components of the course. If you do not have an official written excuse or prior approval, a mark of zero will be assigned for that exam. Late Term Papers will be penalized at 10% per day, up to 3 days.

Schedule of Lecture topics:

Week	Date	Major Topic	Chapter
1	Jan 9	Introduction and scope	1
2	Jan 14/16	Ecological and evolutionary immunology	2
3	Jan 21/23	Parasitic protists	3
3	Jan 28/30	Platyhelminths	6
4	Feb 4/6	Microsporidians/Myxozoans	4/5
5	Feb 11/13	Acanthocephalans/Pentastomes	7/10
6	Feb 25/27	Nematodes/Nematomorphs	8/9
7	Mar 4/6	Arthropods	11
8	Mar 11/13	Parasite population ecology	12
9	Mar 18/20	Parasite biogeography	14
10	Mar 25/27	Effects of parasites on hosts I	15
11	Apr 1/3	Effects of parasites on hosts II	15
12	Apr 8/10	Parasite evolutionary and coevolutionary biology	16
13	Apr 15	Environmental parasitology	17

Schedule of Lab Topics:

Week	Date	Major Topic
1	Jan 24	Protists
2	Jan 31	Platyhelminths
3	Feb 14	Acanthocephalans and other oddballs
4	Feb 28	Nematodes and arthropods
5	Mar 7	Biology of a gall former and its' enemies
6	Mar 14	Population biology of larval parasites in fish
7	Mar 21	Dynamic modeling – Microparasites (B516)
8	Mar 28	Dynamic modeling – Macroparasites (B516)
9	Apr 4	Oral Presentations I
10	Apr 11	Oral Presentations II