

**Biology 4111WA
Parasitology
Course syllabus**

Winter term 2019

TEXTS: Textbooks: **T.M. Goater, C.P. Goater and G.W. Esch. Parasitism. The Diversity and Ecology of Parasites 2nd ed. Cambridge University Press.**
R. S. Desowitz. New Guinea Tapeworms and Jewish Grandmothers . W.W. Norton
Lab Manual: **Available for download from mycourselink (when activated)**

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OFFICE HOURS: posted on office door or by appointment

LECTURES: MWF – 1:30 – 2:30 am – ATAC 2020

LABORATORY: Th – 2:30 – 5:30 pm – CB 3012 (First lab: 17 January)

EVALUATION:

Lecture Midterm	=	15 % (15 February)
Lecture Final	=	20 % (TBA)
iClicker	=	10%
Lab Assignment 1	=	10% (due 26 February)
Lab Assignment 2	=	10% (due 7 April)
Lab Exam	=	value 15% (2 April)
Term Paper	=	value 20% (TBA)

GRADES:

A+	≥	90
A	=	80 – 89 (1 st class standing)
B	=	70 – 79
C	=	60 – 69
D	=	50 – 59
E	=	40 – 49 (failed)
F	=	1 – 39 (failed)
F Academic Dishonesty	=	0

Withdrawal without academic penalty: 8 March 2019

COURSE OBJECTIVES:

Lectures

The intent of this course is to introduce you the major animal phyla with significant numbers of parasitic representatives. The basic concepts of parasitism will be emphasized as a continuing theme including ecological, evolutionary, immunological and biochemical aspects from the perspective of both the parasite and the host.

There will be a term paper that will be based on a recent parasitological research. The topic will address some evolutionary, ecological, behavioural, biochemical, and/or immunological aspect of parasitism. The paper will be a review of that particular topic. By review I mean that you will start by explicitly identifying the topic being reviewed followed by current discussions, ideas, data, and/or controversies. If there are alternate hypotheses and interpretations of data I fully expect you to present both sides with your conclusion of the relative merits of each. If the topic is one that involves confirmation of a phenomenon, (e.g. how cestodes absorb nutrients), I expect to see papers from several authors providing evidence in support of the hypotheses. I will provide more details on the paper in class.

There also will be inclass discussion of relevant chapters of the book New Guinea Tapeworms and Jewish Grandmothers. You will be informed when this will occur and it is expected you will have read the chapter and be capable of contributing to meaningful discussions of the relevant topics.

Laboratories

The purpose of the laboratory is to learn the methods involved in assessing host-parasite interactions. These include: (1) learning the morphology and identity of representatives of some of the major parasitic phyla; (2) necropsy procedures; (3) preservation, handling and identification of parasites; (4) an investigation into the interactions between parasites and hosts. There will be 2 assignments associated with the lab. The first will involve the necropsy of a host, collection, preservation, processing and identification of any parasites you may collect. The class data will be pooled and each student will be responsible for producing a journal quality report using these pooled data. The second involves a study involving the association between parasites and hosts of different ages and sexes. This will investigate site segregation in the host and any host factors that may affect this as well as host attributes that may affect intensity of infection. Each student will be responsible for producing a journal quality report using the data pooled from this study. In both assignments you will learn some very basic statistics associated with parasitism as well as for testing relevant hypotheses. Either of these can be modified based on the availability of hosts appropriate for the exercise.

iClicker

Part of the course evaluation will make use of clicker technology. These are remote units unique to each student available for purchase in the bookstore. You will answer questions in class and lab (multiple choice) using the clicker to enter your answer. These will provide you and me with insight regarding your understanding of various concepts and principles as the course proceeds.

Scoring is 1 point for answering the question and 1 point for providing a correct answer. The final score for the clicker portion of your grade will be based on 80% of the total number of available points. For example, if there are 100 total points, your score will be calculated out of 80. If you answer every question, and get them all wrong, then you would still get 50/80. This allows for absences, forgotten clickers, and reduces any punitive aspect to this part of the grade. It also means you can score more than 100% for this part of your grade.

COURSE POLICIES

Exams:

Missed exams will receive a grade of zero unless you are absent for a documented valid reason such as a family or medical emergency. If you wish to have an exam regraded you must submit a written explanation of why you think the assigned grade was incorrect within 2 weeks of return of the exam. Be aware the entire exam will be re-evaluated and your mark may go up, remain the same, or go down.

Note: this does not apply to arithmetic errors such as incorrect addition. You may bring these types of errors to my attention for correction, without a written explanation, at any time.

Term Paper:

Papers submitted late will be penalized 10% per day except for a documented valid reason such as a family or medical emergency. Papers will not be graded in the absence of a completed and signed form indicating the understanding of plagiarism in its many forms. This will require the completion of an online exercise and quiz relating to plagiarism. Additional direction regarding topics and format will be provided in class.

Academic Dishonesty:

(The following is taken directly from the University website, with minor modification.)

The University takes a most serious view of offences against academic honesty. Penalties for dealing with such offences will be strictly enforced.

The following rules shall govern the treatment of candidates who have been found guilty of attempting to obtain academic credit dishonestly.

(a) The minimum penalty for a candidate found guilty of plagiarism, or of cheating on any part of a course will be a zero for the work concerned.

(b) A candidate found guilty of cheating on a formal examination or a test, or of serious or repeated plagiarism, or of unofficially obtaining a copy of an examination paper before the examination is scheduled to be written, will receive zero for the course and may be expelled from the University.

A copy of the "Code of Student Behaviour and Disciplinary Procedures" may be obtained from the Office of the Registrar.