**PARASITOLOGY BIO 354/554**

**Lecture Schedule**

**MW 11:30 AM-12:30 PM HS 202**

**F 10:20 AM-12:20 PM HS 30**

**Spring 2017**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Topic | Ref\* | LAB (Live) |
| Jan 30  Feb 01  Feb 03 | Parasitology Basics  Parasite Ecology and Epidemiology  **Lab 1** | 1  2 | Microscope use |
| Feb 06  Feb 08  Feb 10 | African Trypanosomes  American Trypanosomes, *Leishmania*  **Lab 2** | 4,5  5 | Flagellates |
| Feb 13  Feb 15  Feb 17 | Other flagellates: *Giardia* and trichomonads  Flagellates cont., Amebas  **Lab 3** | 6  7 | Amebas and Ciliates |
| Feb 20  Feb 22  Feb 24 | Coccidia  Malarias  **Lab 4** | 8  8 | Apicomplexans |
| Feb 27  Mar 01  Mar 03 | Malarias  Intro to Cestoda  **EXAM I** | 9  9 | **EXAM I** |
| Mar 06  Mar 08  Mar 10 | Cestoda: *Diphyllobothrium*, *Taenia*  Cestoda: *Echinococcus*, *Hymenolepis*  **Lab 5** | 20, 21  21 | Cestodes  (*Hymenolepis*) |
| Mar 13  Mar 15  Mar 17 | Cestoda: *Dipylidium*  Digenea: *Fasciola*,*Dicrocoelium*,*Paragonimus*  **Lab 6** | 21  15,17,18 | General Digenea |
| Mar 20  Mar 22  Mar 24 | **Spring Break** |  | **Be Safe!** |
| Mar 27  Mar 29  Mar 31 | Digenea: *Chlonorchis*  Digenea: Schistosomes  **Lab 7** | 18  16 | Schistosomes  (*S. mansoni* mice) |
| Apr 03  Apr 05  Apr 07 | Digenea: Schistosomes  Nematoda: Order Trichurida  **EXAM II** | 16  22,23 | **EXAM II** |
| Apr 10  Apr 12  Apr 14 | Nematoda: Rhabdita and Strongylida  Nematoda: Ascarids  **Lab 8** | 22,23  26 | Nematodes I |
| Apr 17  Apr 19  Apr 21 | Nematoda: Oxyurids and Filariae  Arthropoda: Lice  **Lab 9** | 27,29  33,36 | Nematodes II  (Frog survey) |
| Apr 24  Apr 26  Apr 28 | Arthropoda: Bugs and Fleas  Arthropoda: Diptera I; mosquitoes  **Lab 10** | 37,38  39 | Diagnostics |
| May 01  May 03  May 05 | Arthropoda: Diptera II; flies; Arachnids  Diptera, cont.  **Lab 11** | 39  39 | Arthropods and Vectors (*Acanthocheilonema* ticks) |
| May 08  May 10  May 12 | Vector control  TBA  **EXAM III** | 39 | **EXAM III** |

\*Chapter references in Foundations of Parasitology by Roberts and Janovy, 8th ed. Specific reading assignments may be given in class.

LECTURER: DR. SHELLY MICHALSKI phone: (920) 424-7082 e mail: [michalsk@uwosh.edu](mailto:michalsk@uwosh.edu)

**Text and Lecture Notes**

The text for this course is Foundations of Parasitology, 8th edition by Schmidt, Roberts and Janovy. The text is available in the bookstore and should be purchased prior to the first day of class. If you get a different edition that’s fine, just be aware that the chapters may be in a different order. Additional reading assignments may be introduced in class.

Limited lecture notes and other course documents such as lab notes will be available through the course D2L site (https://uwosh.courses.wisconsin.edu/). You may want to consult the optional lab manual that is on D2L, written by Steve Upton at Kansas State, if you are interested in collecting and preserving parasites on your own. Relevant communication will be done through the UWO e-mail system, it is the student’s responsibility to make sure their UWO account is forwarded if they use an external e mail provider.

**Course Objectives**

In this course we will examine the impact of parasites on human and animal populations. Study of parasites will include host spectrum, geographic distribution, morphology, life cycles, pathogenesis, control measures, vector control and public significance. An overall effort to emphasize the evolutionary importance of host-parasite relationships will be made. Laboratory will familiarize students with the morphology and life habits of different parasites and vectors.

**Graded Work**  
**Lecture:** Three exams will be given on the indicated laboratory periods (see syllabus for dates). Each will be composed of objective and subjective questions and will cover both lecture and laboratory material. Undergraduate exams are worth 100 points each. There are 10 points of additional questions for graduate students on each exam. Graduate students are required to answer these questions, while *undergrads may attempt to answer them for extra credit* *at no penalty* *for wrong answers*. Makeups of exams are not allowed except in the proven cases of severe illness of a student or death of an immediate family member. I reserve the right to determine the format and content of makeup exams. There will be no exceptions made.

**Laboratory:** The laboratory is used to reinforce and expand upon course material. In lab we will view preserved slides/specimens, pictures, and in some cases, live parasites within hosts. This often gets messy, and students are expected to clean their stations before they leave. Because live animal work takes considerable time, students may need to come back on their own time to view slides and preserved specimens. We share the lab with Biology 230 and it will shut down during their testing dates, so it is best to keep current with the laboratory material.

**Required readings:** Two reading projects will be assigned worth 25 points each. The subject matter will be determined by the instructor. Graduate students may get more detailed reading assignments than undergrads, but their assignment will still be worth 25 points. Late assignments will lose 10% per weekday.

**Graduate Review Paper:** Graduate students will demonstrate their mastery of the primary literature by summarizing a series of articles on the parasite topic of their choice. Details will be provided later in the semester. Late assignments will lose 10% per weekday.

**Attendance Policy**

Attendance is expected for every lecture and lab session (see “Course Attendance” statement in the Undergraduate Bulletin). Lab attendance is particularly important since no formal make-up labs will be provided. If you know that you will miss a lab, contact me in advance for other possible arrangements.

**Outside Readings**

Outside reading assignments may be used to supplement text/lab material. Copies of the readings will be placed on reserve or handed out in class. You will be responsible for all reading material on exams.

**Grading Scale** The following grading scale will be used as a guideline. A grade book is continually available on the D2L site so you can check your progress.

Percentage Grade

93-100 A

90-92 A-

87-89 B+

83-86 B

80-82 B-

77-79 C+

73-76 C

70-72 C-

67-69 D+

64-66 D

60-63 D-

<60 F

**Point Distribution**

**Undergraduate Graduate**

Lecture exams (3 total) 300 pts 330 pts

Graduate Review Paper -- 50 pts

Reading assignments (2 total) 50 pts 50 pts

**Total 350 pts 430 pts**

**For The Graduate Students taking Bio 554:**

Graduate students will have the following additional objectives activities in order to

receive graduate credit for Parasitology.

Objectives:

1) Graduate students will be expected to demonstrate a greater depth of knowledge of the material compared to undergraduate students.

2) Graduate students will be expected to demonstrate a higher level of synthesis than

undergraduate students.

3) Graduate students will be expected to demonstrate a more sophisticated level of

communication than undergraduates.

In order to meet the graduate objectives, they will have to answer at least one additional essay

question on each exam that is designed to test their ability to synthesize information from lecture and apply it to a more complex problem than is expected from undergraduates. They will also complete a review paper that requires them to find pertinent information in the current primary literature and present it in a concise written review. Therefore, the point total will be slightly higher, but the grades will be based on the same percentage system as shown above. In addition, a grade less than a C is a failing grade for graduate students.

**Academic Integrity**

Students are expected to uphold the guidelines of academic integrity put forth by University of Wisconsin-Oshkosh. Violation of these standards (i.e. cheating) will result in formal written reprimand, a failing grade for the course, and possible disciplinary probation.

**Common Courtesy**

A ringing cellular phone disrupts the learning process of your neighbors. Please turn off all cell phones and pagers prior to class. Please text outside of class.

**Americans with Disabilities Act:**

UWO is committed to providing accommodations and/or services to students with documented disabilities. Students who are seeking support for a disability should contact Disability Services, 125 Dempsey Hall. Phone: 424-3100; TTY 424-1319; email http://www.uwosh.edu/deanofstudents/disability-services

**Contact Information:**

Instructor: Dr. Shelly Michalski

Office: Halsey 152

Phone: (920) 424-7082 Department Phone: (920) 424-1102

E mail: [michalsk@uwosh.edu](mailto:michalsk@uwosh.edu)

Office hours: MW 3-4 PM, or by appointment.