



## **ABIO 598P PARASITOLOGY SPRING 2005**

**INSTRUCTOR:** Dr. Heather Bennett

**OFFICE:** SBDG 101C

**OFFICE PHONE:** (803) 641-3472

**E-MAIL:** [HeatherB@usca.edu](mailto:HeatherB@usca.edu) (often the quickest way to reach me)

**OFFICE HOURS:** by appointment and as indicated on the schedule posted on my door. In general, if I am in my office and the door is open, it's an office hour. Please come and visit me. I don't bite.

**LECTURE TIME:** Monday and Wednesday 1-2:15

**LECTURE PLACE:** SBDG 200

**LAB:** Monday 2:30-5:10

**LAB PLACE:** SBDG 103 (downstairs)

**TEXTBOOK:** none (!); Dr. B.'s PowerPoint outlines will be distributed in class. Other readings (see below) are posted on Dr. B.'s website for downloading as needed or will be distributed in class.

**LAB MANUAL:** Color Atlas of Parasitology.

**OPTIONAL (but highly recommended) SUPPLIES:** gridded laboratory notebook, colored pencils

### **COURSE DESCRIPTION:**

**METHODS OF PRESENTATION:** There will be a variety of presentation styles in this course, including traditional lectures by the professor. Student discussion is strongly encouraged! Laboratories will be entirely hands-on and will consist of observation of living and preserved organisms as well as experimental work.

**METHODS OF EVALUATION:** Grades will be determined by lecture exams, laboratory practical exams along with shorter lecture and/or lab assignments.

**GRADING:** You have the opportunity to earn 650 points in this course.

|   |     |
|---|-----|
| Two (2) lecture exams @100 points each..... | 200 |
| Final Examination.....                      | 200 |

|  |     |
|--|-----|
| Reading Reports (4) @10 points each.....                 | 40  |
| Oral Presentations of paper (1) @10 points.....          | 10  |
| Laboratory*  |     |
| Three (3) laboratory exams @50 points each.....          | 150 |
| Two (2) written laboratory reports @ 25 points each..... | 50  |
| TOTAL.....   | 650 |

\*Please note that you must pass the laboratory in order to pass the course.

**WHAT I EXPECT FROM YOU:**

1. I expect you to have done the assigned reading before class.
2. I expect you to be an active and enthusiastic participant in all lecture and laboratory activities.
3. I expect you to be respectful to me and to the other students in the class.

**DR. B.'S BIGGEST PET PEEVES:**

- 1) Cell phones must be turned off during both lecture and lab. Should I hear a phone ring in lecture, I will immediately stop lecture and administer a pop quiz to the entire class. Cell phones must be stored in your *closed* bookbag, purse or briefcase during all examinations in both lecture and lab.
- 2) You *must* come on time for class. Class starts promptly at 1:00 P.M.
- 3) Cheating. You are expected to endorse the USCA Honor Pledge on each assignment you turn in. *If you cheat, I will catch you.* When you are caught, I will issue a grade of F *for the course* and turn you in to the appropriate University office, recommending that you be dismissed from the University.

**WHAT YOU CAN EXPECT FROM ME:**

- 1) I will begin class on time every time.
- 2) I will answer any and all questions you may have, and if I don't know the answer off hand I will find the answer and report back to you ASAP.
- 3) I will do everything in my power to help you earn the grade you desire.

**ATTENDANCE AND MAKE-UP POLICIES:**

LECTURE: I will occasionally take roll in the lecture section. If you choose to miss class, please be advised of two things: 1) I will not provide you with a copy of my lecture notes and 2) you are responsible for any and all announcements that are made during lecture.

If you miss a lecture examination, it is *your* responsibility to follow the following procedure in order to make it up:

- 1) You must contact me NO LATER than 10:00 A.M. the day the test was administered to explain your absence. You may e-mail me or call my office.

2) Lecture exams may be made up only for reasons outlined in the Student Handbook. Examples of ACCEPTABLE excuses include illness requiring a doctor's care, death in the immediate family (parent, sibling, grandparent) and University-sponsored trips such as those for athletic events. Examples of UNACCEPTABLE absences are oversleeping, appointments of any kind (including academic advisement) and vacations at times other than official University vacation periods. Documentation (death notices, doctors' notes, towing/ garage bill, etc.) must be provided to me upon my request.

Make-up exams will be given at my convenience and may be in one of two formats (my choice): an oral examination or a series of lengthy essay questions. ***No exceptions to these policies and procedures will be made.***

**LAB:** You must attend at least 70% of all laboratory meetings. This means that you may only miss three (3) laboratory meetings. No makeup labs are available *even if* the excuse is legitimate. If you choose to miss a lab, you will still be held responsible for the material on subsequent laboratory quizzes and practical exams. **NO MAKE-UP LABORATORY QUIZZES OR EXAMS WILL BE GIVEN!!!**

**Statement on studying:** A good rule of thumb for studying for college courses is that for each hour you are in class you should plan to study for a minimum of two hours outside of class. For this class, you are in lecture/lab for a total of 5 hours and 10 minutes. Thus you should plan on having to spend *at least* 10.5 hours outside of class each week studying the material from this course. If you choose to study significantly less than 10.5 hours/week, you cannot expect to be successful. You should plan on extra time in the lab to study the prepared slides.

**Statement on disabilities:** If you have a physical, psychological and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126A B&E (803) 641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.

### **Additional information about the lecture:**

Discussion Papers: We will be discussing six papers during the course of the semester. PDFs of the papers are available on Dr. B. website for downloading. These papers are primarily review articles covering major topics of parasite biology. Dr. B. will lead the first discussion, then you and your partner will sign up to lead one of the remaining five discussions. You must also submit four reading reports on these discussion papers. The format for reading reports is attached to this syllabus.

Potential due dates for reading reports and oral presentations. Sign-up sheet for presentation dates is posted in the lab.

January 24 (reading report only; Dr. B. will present)

February 7, 28

March 21

April 4, 18

### **Additional information about the lab:**

- The lecture session on Mondays will be used for 1) discussion of papers as scheduled and 2) lecture about the parasites you will be looking at that week or 3) experiments using live parasites.
- Parasite life cycles will be distributed in the lab. For each parasite we cover you are responsible for the following:
  - i. The life cycle of the parasite (including modes of transmission and host(s))
  - ii. Pathogenicity of the parasite (i.e. the effects on the host(s))
  - iii. Diagnosis and treatment of the parasite in the host(s)
  - iv. Other information as indicated by Dr. B.

All of this information will be covered on the laboratory exams. Lab exams will have a practical part as well as a written part.

- You will turn in three lab reports reporting your results from two of the following four experiments. Reports are due two weeks after the experiment is completed. A guide for preparing these reports can be found on the Biology and Geology website. Dr. B. will discuss the proper format and demonstrate the right way to do a literature search and how to correctly cite scientific articles in your paper. The following are fair game for your reports:

Blowfly experiments

Earthworm parasites

Tick flagging

Termite endosymbionts

Schedule for lecture and lab activities. Please note that the dates for exams will not change.

| DATE            | ACTIVITY  | READING  |
|-----------------|---|--|
| January         |   |  |
| 10 M            | Introduction to the course  |  |
| 12              | Introduction to parasites I   |  |
| 17 M            | NO SCHOOL   | 10 extra credit points awarded for performing community service! |
| 19              | LECTURE: Introduction to parasites II                                   |  |
| 24 M            | LECTURE: Paper discussion (Dr. B. will lead)<br>LAB: prepared specimens |  |
| 26              | LECTURE: Immunology, pathology  |  |
| 31 M            | LECTURE/LAB: set up blowfly experiment; prepared specimens              |  |
| <b>FEBRUARY</b> |   |  |
| 2               | LECTURE: Population dynamics  |  |
| 7 M             | LECTURE: Paper discussion<br>LAB: Prepared specimens                    |  |
| 9               | LECTURE: parasite populations and epidemiology                          |  |
| 14 M            | <b>LECTURE/LAB: Lab Exam I</b>  |  |
| 16              | LECTURE: Parasite-host relationships                                    |  |
| 21 M            | LECTURE/LAB: earthworm parasites; prepared slides                       |  |
| <b>23</b>       | <b>LECTURE: Exam I</b>  |  |
| 28 M            | LECTURE: paper discussion<br>LAB: prepared slides                       |  |
| <b>MARCH</b>    |   |  |
| 2               | LECTURE: reproduction   |  |
| 7               | NO SCHOOL   | DON'T DRINK  |
| 9               | NO SCHOOL   | AND DRIVE!!!!  |
| 14 M            | LECTURE/LAB: tick   |  |

|           |   |                     |
|-----------|---|---------------------|
|           | flagging; termite squash;<br>prepared slides          |                     |
| 16        | LECTURE: parasite<br>communities                      |                     |
| 21 M      | LECTURE: Paper<br>discussion<br>LAB: prepared slides  |                     |
| 23        | LECTURE: biogeography<br>of parasites                 |                     |
| 28 M      | <b>LECTURE/LAB: Lab<br/>Exam II</b>                   |                     |
| 30        | LECTURE: parasite<br>evolution                        |                     |
| APRIL     |   |                     |
| 4 M       | LECTURE: Paper<br>discussion;<br>LAB: Prepared slides |                     |
| 6         | LECTURE: GROSS OUT<br>DAY!!!                          |                     |
| 11 M      | LECTURE/LAB: prepared<br>slides                       |                     |
| <b>13</b> | <b>LECTURE: Exam II</b>                               |                     |
| 18 M      | LECTURE: Paper<br>discussion<br>LAB: Prepared slides  |                     |
| 20        | LECTURE: review and<br>wrap-up                        |                     |
| 25 M      | <b>LECTURE/LAB: Lab<br/>Exam III</b>                  | LAST DAY OF CLASSES |