BIOL 4433 - Parasitology

Spring 2015

Course: BIOL 4433 Parasitology
Lecture: MWF 8:00-8:50 am
Room: EN 108
Lab: M 1:00-4:00 pm CS 235
     W 1:00-4:00 pm CS 235

Instructor: Bart Cook III
Email: bart.cook@tamucc.edu
Office: EN 309
Phone: 361-825-2683
Office: 7:00-8:00 am MWF
        10:00 am F
        or by appointment-please see sign up posted on my office door

COURSE DESCRIPTION:
BIOL 4433-Parasitology is a course that focuses upon animal parasites, including protozoa and metazoan forms. While emphasis will be placed on parasites of medical importance, those affecting domestic and wildlife species will be discussed when relevant.

An overview of the ecological role that animal parasites play will be presented, as well as discussion of general principles of non-microbial parasitism.

The laboratory will consist of identification of various development stages of selected animal/human parasites using prepared slides.

STUDENT LEARNING OUTCOMES:
Lecture:
A) The student will understand the concept of symbiosis parasitism, host parasitic relationships, and host specificity.
B) Basic principles of epidemiology will be learned as human parasites
C) The student will learn the specific characteristics of major taxonomic groups of animal parasites.
D) The treatment, prevention and control of selected parasitic diseases will be learned
E) The student will learn the life cycle of selected parasite species.
F) The student will understand what animal parasitic diseases are most prevalent in various parts of the world and specifically in the United States.
G) The student will able to apply the knowledge gained in this course in a practical sense such as to avoid the likelihood of contracting parasitic diseases.

H) In the laboratory, the student will learn to employ the use of the compound microscope and dissecting microscope in the study of parasite life cycle stages.

I) The student will learn to identify using a microscope, the specific life style stages.

J) The student will gain knowledge and skills relative to identifying alcoholic specimens of animal parasites.

Course Grading:
There will be three (3) lecture exams equally weighted during the semester. The 3rd exam will be given during the week of finals. The mean (x) of the two highest lecture scores will represent ¾ of the student’s course grade. All three (3) lecture exams must be taken.

In general there will be no makeup exams. The only exceptions are makeup lecture exams based on the prior approval of the instructor with a stipulated date for the makeup exam. The exceptions will be made only for students whose exams are in direct conflict with a University sanctioned activity.

Attendance in the laboratory is mandatory. There will be no lab practical makeup exams. The lab will be based on the mean (x) of two lab practical exams. The lab grade will represent ¼ of the students total grade. The following grading scale will be used in determining the course grade:

Grading System*
A=90-100%
B=80-90%
C=70-80%
D=60-70%
F=0-60%

*At the discretion of the instructor, curve points may be added to the students final overall class average. If curve points are given, each and every student will receive the same number of points. No extra credit work is permitted.

Student work: Each student is required to do independent work on each of the lecture and lab exams.

Plagiarism: will result in failure of the course (F) and possible disciplinary action by the college and university.
Assignments handed in after the due date will be subject to penalty points deducted for the assignment grade.

NOTE: The official deadline for dropping any course during the 2015 Spring semester is April 10, 2015.
### REVISED LECTURE READING SCHEDULE

**BIOL 4433 Parasitology**

**Spring Semester 2015**

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<tr>
<th>CHAPTER</th>
<th>MATERIAL</th>
<th>PAGES</th>
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<td>1</td>
<td>Symbiosis and Parasitism</td>
<td>1-14</td>
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<td>2</td>
<td>Parasite Host Interactions</td>
<td>15-36</td>
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<td>3</td>
<td>Protozoa-General Characteristics</td>
<td>37-52</td>
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<td>4</td>
<td>Visceral Amobae and Ciliates</td>
<td>53-72</td>
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<td>5</td>
<td>Visceral Flagellates</td>
<td>73-84</td>
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<td>6</td>
<td>Blood and Tissue Flagellates</td>
<td>85-114</td>
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<td>7</td>
<td>Malaria and genus Plasmodium</td>
<td>115-136</td>
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<td>8</td>
<td>Other blood and tissue protozoa</td>
<td>137-152</td>
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<tr>
<td>9</td>
<td>Flukes-General Characteristics</td>
<td>153-178</td>
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<td>10</td>
<td>Visceral Flukes</td>
<td>179-196</td>
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<td>11</td>
<td>Blood Flukes</td>
<td>197-215</td>
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<tr>
<td>12</td>
<td>Tapeworms-General Characteristics</td>
<td>217-236</td>
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<tr>
<td>13 &amp; 14</td>
<td>Tapeworms-Intestinal and others</td>
<td>237-268</td>
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<tr>
<td>15</td>
<td>Nematodes-General Characteristics</td>
<td>269-290</td>
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<td>16</td>
<td>Intestinal Nematodes</td>
<td>291-328</td>
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<td>17</td>
<td>Blood and Tissue Nematodes</td>
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### Lab Schedule

**BIOL 4433-PARASITOLOGY**

**Spring 2015**

<table>
<thead>
<tr>
<th>Lab Day and Date</th>
<th>Topic</th>
<th>Lab Manual-reference pages</th>
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<tbody>
<tr>
<td>Mon, Jan 26</td>
<td>Introduction, safety, microscope use</td>
<td></td>
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<tr>
<td>Wed, Jan 28</td>
<td>Introduction, safety, microscope use</td>
<td></td>
</tr>
<tr>
<td>Mon, Feb 02</td>
<td>Amoebas and Flagellate Protozoa</td>
<td>Ch. 1 pp 2-16</td>
</tr>
<tr>
<td>Wed, Feb 04</td>
<td>Amoebas and Flagellate Protozoa</td>
<td>Ch. 1 pp 2-16</td>
</tr>
<tr>
<td>Mon, Feb 09</td>
<td>Amoebas and Flagellate Protozoa</td>
<td>Ch. 1 pp 2-16</td>
</tr>
<tr>
<td>Wed, Feb 11</td>
<td>Amoebas and Flagellate Protozoa</td>
<td>Ch. 1 pp 2-16</td>
</tr>
<tr>
<td>Mon, Feb 16</td>
<td>Amoebas and Flagellate Protozoa</td>
<td>Ch. 1 pp 2-16</td>
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<tr>
<td>Wed, Feb 18</td>
<td>Amoebas and Flagellate Protozoa</td>
<td>Ch. 1 pp 2-16</td>
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<tr>
<td>Mon, Feb 23</td>
<td>Malarial Parasites</td>
<td>Ch. 1 pp 17-34</td>
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<tr>
<td>Wed, Feb 25</td>
<td>Malarial Parasites</td>
<td>Ch. 1 pp 17-34</td>
</tr>
<tr>
<td>Mon, Mar 02</td>
<td>Malarial Parasites</td>
<td>Ch. 1 pp 17-34</td>
</tr>
<tr>
<td>Wed, Mar 04</td>
<td>Malarial Parasites</td>
<td>Ch. 1 pp 17-34</td>
</tr>
<tr>
<td>Mon, Mar 09</td>
<td>1st lab practicum</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Wed, Mar. 11</td>
<td>1st lab practicum</td>
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<tr>
<td>Mon, Mar 16</td>
<td>SPRING BREAK</td>
<td>SPRING BREAK</td>
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<tr>
<td>Wed, Mar 18</td>
<td>SPRING BREAK</td>
<td>SPRING BREAK</td>
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Mon, Mar 23

Wed, Mar 25  Flukes and Fluke Eggs  Ch. 2. pp 44-85
Mon, Mar 30  Flukes and Fluke Eggs  Ch. 2. pp 44-85
Wed, Apr 1  Flukes and Fluke Eggs  Ch. 2. pp 44-85
Mon-Apr 06  Flukes and Fluke Eggs  Ch. 2. pp 44-85
Wed, Apr 08  Tapeworms & tapeworm eggs  Ch.3, pp 86-110
Mon, Apr 13  Tapeworms & tapeworm eggs  Ch.3, pp 86-110
Wed, Apr 15  Tapeworms & tapeworm eggs  Ch.3, pp 86-110
Mon, Apr 20  Tapeworms & tapeworm eggs  Ch.3, pp 86-110
Wed, Apr 22  Spiney Headed Worms, nematodes & nematode eggs  Ch.4, pp 111-117
Mon, Apr 27  Spiney Headed Worms, nematodes & nematode eggs  Ch.4, pp 111-117
Wed, Apr 29  Second lab practical, Metazoa  Ch.2,3,4

Mon, May 04  Second lab practical, Metazoa  Ch.2,3,4

This lab practical is tentative and may be subject to unannounced changes

- See ch 5, pp 174-177 for helminth egg identification
- **NOTE:** the official deadline for dropping any course during the 2015 spring semester is April 10, 2015
Academic Integrity/Plagiarism*

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

Dropping a Class*

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. (April 10, 2015) is the last day to drop a class with an automatic grade of “W” this term.

Classroom/professional behavior**

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

Statement of Civility (can be in place of classroom/professional behavior)**

Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.
**Grade Appeals**

As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage (http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

**Disabilities Accommodations**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

**Statement of Academic Continuity**

In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University—Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

*Recommended by university, language provided that mirrors language used in other publications such as the student handbook or rules/procedures.

**Recommended by university, select one from the two items regarding behavior/civility or insert a similar statement based on your class needs.

***Required by SACS or HB2504—language must be included