

Biology 3870/5870 Parasitology

CRN (3870-81299, 5870-81320) – 4 credit hours

Fall Semester, 2013

Instructor - Dr. J. Mitchell Lockhart

Office - Science Building 2029

Phone: 333-5767 / 333-5759 (Biology Office)

Email: jmlockha@valdosta.edu

Office Hours: As posted or by appointment

Course hours: Lecture – Tuesday and Thursday, **9:30-10:45**, Science Building Rm. 2022

Lab – **9:00** – 11:50 Wednesday – Science Building 2071

Textbook – Foundations of Parasitology, 9th edition. Gerald D. Schmidt and Larry S. Roberts, McGraw Hill (**Required**). Text is available online through CourseSmart.

Laboratory Textbook – None. Lab material will be available on Blazeview.

Prerequisites: BIOL 1107, 1108, 3200 and 3250 or permission of instructor.

Course Objectives: A study of the morphology, life cycles, and host-parasite relationships of representative protozoan and metazoan parasites. Human parasites are emphasized.

Attendance: MANDATORY! I do keep track of who is and isn't attending lecture and laboratory. This course has a considerable amount of new concepts and terminology and it serves your best interest to attend class regularly. Any student disrupting the classroom and affecting the learning experience of others will be asked to leave. Along these lines, **NO** cell-phones, beepers,

Cheating: Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class.

Important Dates: **Midterm day,**

Course Outcomes:**Course:**

By the end of BIOL 3870, students who successfully complete the course should have:

1. Gained factual knowledge, to include anatomy/histology terminology, methods, and principles, about Parasitology. (DO – 2,3,5; VSUGEO – 5)
2. Learned fundamental principles, generalizations, or theories of Parasitology. (DO – 2,3,5; VSUGEO – 5)
3. Learned to apply course material (to improve thinking, problem-solving, and decisions) in Parasitology. (DO – 2,3,5; VSUGEO – 5)
4. Developed specific skills, competencies and points of view needed by professional in the fields most closely related to Parasitology. (DO – 2,3,5; VSUGEO – 5)
5. Acquired an interest in learning more by asking questions and seeking answers about Parasitology. (DO – 2,3,5; VSUGEO – 5)

Department:

1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.
2. Describe the evolutionary processes responsible for biological diversity, explain the phylogenetic relationships among the major taxa of life, and provide illustrative examples.
3. Demonstrate an understanding of the cellular basis of life.
4. Relate the structure and the function of DNA/RNA to the development and function of the

4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write

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Tentative Lecture Outline -

Final Exam: Thursday, December 5, 10:15-12:15

Tentative Lab Schedule:

Lab 1 – Order Trypanosomatida – Trypanosomes

Lab 2 – Order Kinetoplastida – Leishmania

Lab 3 – Other Flagellate Protozoa

Lab 4 – Phylum Ciliophora

Lab 5 – Phylum Sarcodina

Lab 6 – Phylum Apicomplexa- Plasmodium vivax

Lab 7 – Phylum Apicomplexa – Plasmodium falciparum

Lab 8 – Phylum Apicomplexa – Coccidia

Lab 9 – Phylum Platyhelminthes – Order Strigeiformes

Lab 10 – Echinostomatiformes

Lab 11 – Nematoda I

Lab 12 – Nematoda II

Lab 13 – Cestoda

Lab 14 – Ectoparasites

Lab Exam 1 – Following Lab 7

Lab Exam 2 – Following Lab 14