th edition. Gerald D. Schmidt and Larry S. Roberts, McGraw Hill (**Suggested**). 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 alloward hithes in the lecture room or laboratory.

- **Privacy Act**: Because of the Buckley Amendment or Privacy Act, grades will not be discussed over the phone, via email, given to friends, or given to relatives
- **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, TBD, FINAL EXAM: August 1 9:35AM – 11:35PM

* The Instructor reserves the right to modify the above contents with proper notification.

Other Assignments/Case History Assignments: Your instructor MAY periodically assign some tasks to be completed during class or outside of class. These can be based on lab exercises or lecture material. Your grade will be determined by how well you complete the assignment. Point values remain to be determined.

Laboratory Portfolio (200 points)

In laboratory, you will be preparing an exhaustive series of original drawings of your observations of parasites and vectors through the microscope. Each lab unit has a series of designated drawings you are to do. These are to be drawings of your observations through a microscope, not of your ability to copy an image at home from a picture. Should it become necessary that I check every notebook at the end of each lab I will. I will spot check notebooks during lab to see that you are making satisfactory progress. Each drawing should be on the laboratory drawing sheet and should be labeled to include identification of the image and magnification. Any significant features of your drawing should be labeled. You will be graded on effort (which isn't hard to determine) **NOT** on artistic ability. Keep these drawings in a notebook and PROTECT IT CAREFULLY! You will also scan each of these images and at the end of the semester, you will turn in an original AND electronic portfolio.

Due Date: One day after the final laboratory period.

Powerpoint Assignments (50 points)

For these assignments, you will do a "research powerpoint" on a parasite topic from a list that I will provide. Include a complete description of the parasite/group that you choose an(o)-4.1 (.1 (u.4 1a ")12.2 (ric7 (thp-4.1 (u.4 1a ")12.1 (u.4 1a ")12.2 (ric7 (thp-4.1 (u.4 1a ")12.1 (u.4 1a ")12.2 (ric7 (thp-4.1 (u.4 1a ")12.1 (u.4

Course Outcomes:

Course:

By the end of BIOL 3870

processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.

4. <u>Students will express themselves clearly, logically. and precisely in writing and in speaking, and</u>

Tentative Lecture Outline - This is the order in which we will cover topics.

TOPIC

Introduction to Parasitology Basic Principles and Concepts I: Parasite Systematics, Ecology and Evolution Basic Principles and Concepts II: Immunology and Pathology Parasitic Protozoa: Form, Function, and Classification Kinetoplasta: Trypanosomes and Their Kin Other Flagellated Protozoa The Amebas Phylum Apicomplexa: Gregarines, Coccidia, and Related Organisms Phylum Apicomplexa: Malaria Organisms and Piroplasms Phylum Ciliophora: Ciliated Protistan Parasites Phyla Microspora and Myxozoa: Parasites with Polar Filaments The Mesozoa: Pioneers or Degenerates? Introduction to Phylum Platyhelminthes Trematoda: Aspidobothrea Trematoda: Form, Function, and Classification of Digeneans Digeneans: Strigeiformes Digeneans: Echinostomatiformes Digeneans: Plagiorchiformes and Opisthorchiformes Monogenoidea Cestoidea: Form, Function, and Classification of the Tapeworms Tapeworms Phylum Nematoda: Form, Function, and Classification Nematodes: Trichinellida and Dioctophymatida, Enoplean Parasites Nematodes: Tylenchina, Pioneering Parasites Nematodes: Strongyloidea, Bursate Rhabditians Nematodes: Ascaridomorpha, Intestinal Large Roundworms Nematodes: Oxyuridomorpha, Pinworms Nematodes: Gnthostomatomorpha and Spiruromorpha, A Potpourri Nematodes: Filaroidea, Filarial Worms

Nematodes: Dracunculoidea, Guinea Worms, and Others

Lecture Exams:

- 1 July 8 or 9
- $2-\ July\ 16\ or\ 17$
- $3-\ July\ 31$

Final Exam: August 1, 9:35-11:35AM

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 – July 15

Lab Exam 2 - July 30