Instructor: Dr. Isaure de Buron  
Office hours: by appointment (please email) (may be via zoom meeting)

Office: Off campus (Ft Johnson)  
Phone: 953-3615  
E-mail: deburoni@cofc.edu

Lectures: Rita 152; T and R: 8:00 am-9:15 am
Laboratory: Rita 153; R (L01) 12:00 pm – 3:00 pm or R (L02) 3:05-6:05 pm

Textbook: None requested- However, if you like to study with the support of a textbook, I recommend “Foundations of Parasitology” by L.S. Roberts and J. Janovy Jr.. McGraw Hill

Laboratory: No manual is needed. Handouts are posted on OAKS as needed– Please print them prior to coming to class or bring your computer or other mobile device to lab to access them. You will need a three-ring binder with plain white paper, a ruler (metric system!) and pencils. Because of the nature of some of the laboratory exercises, no make-up labs can be given. In case of quarantine being needed, missed labs will be either posted on line or prorated from notebook grade if not replicable on line (see * in schedule and below’ COVID related accommodations’). Students are responsible for missed material (i.e., if lab exercise cannot be set up on line (*), students must nevertheless read and learn from the handout. While office hours are not to be used for making-up labs, don’t hesitate contacting me if you need further explanations and we will set up a zoom meeting. Please note that depending on availability of material, the schedule might shift. You will be made aware of changes in class and on OAKS before lab. The safety policy that is posted on OAKS and that you will sign at the start of the semester will be strictly enforced. Come to lab prepared.

Course description: Ecology, life history, morphology, pathogenicity, and control of parasites of vertebrates and invertebrates. Emphasis is placed on the social and economic impacts of parasitism using parasites of medical and veterinary importance. Laboratory covers both classical and modern techniques currently used in the study of parasites.

Objectives: This course will initiate students to the major aspects of both parasitology and parasitism by studying what parasites are, what they do, what makes them so successful, and what their roles are in ecosystems.

Learning outcomes: Upon completion of this Parasitology course, successful students will demonstrate:
- an understanding of the fundamental principles of parasitism;
- an ability to outline the general life cycles of the major parasites of medical and veterinary importance;
- an understanding of the ecology of parasites, and of the importance of parasites in the ecosystem;
- an understanding of the methods of control and their limitations;
- an understanding of the concept of zoonoses, emerging or re-emerging diseases, and One Health.

Testing: Quizzes, lecture tests, and the final examination will be a combination of True or False, multiple choice, fill-in the blanks, short answers, drawings, and labeling. The final examination will be cumulative. The lowest quiz grade (including a zero) will be dropped. Quizzes will be given at the start of class and will last ~10-15 min. Tests will last the entire period.

Laboratory notebooks will be picked up at the end of most laboratory to be graded. Each time, a grade will be given on a scale from 0 (non-excused absence or no laboratory notebook left for grading) to 5. Grades will be based upon clarity, accuracy, and completeness. The laboratory test will include identification of specimens, drawings, and labeling as well as demonstration of knowledge of topics covered in the laboratory.

You are expected to do all work in accordance with the principles of the Honor Code

Cell phones must be turned off when in class and taking tests. No texting in class or laboratory! No hats when taking tests. No eating, chewing, or drinking in class or the laboratory.

Please be considerate of others and wear and keep your mask on (cover nose, mouth, and chin) while in class or lab.
**Attendance:** Attendance in lectures is expected and mandatory in laboratories. Attendance will not be taken in lecture (except the week of attendance verification). Attendance will be taken in lab and missing 3 laboratories will result in a failing (F) grade.

**Temporary accommodations will be provided in case of excusable absences (see below ‘COVID related accommodations’).** Regardless, students are responsible for all material and announcements made in class and laboratory, and/or posted on OAKS. These announcements may include changes in the course syllabus, material to review for quizzes and tests, and examination dates. Quizzes and tests missed for non-excused absences will be graded zero.

**Special accommodations:** Any student eligible for and needing accommodations because of a documented disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged.

**COVID related accommodations:** In case you feel ill or need to quarantine or isolate, you will be given temporary access to pre-recorded lectures on OAKS to be watched at the time of the lecture(s) missed. Please make me aware of potential issues in advance if at all possible. Because of the nature of the labs, not all can be replicable on line (see * in schedule). If those particular labs are missed due to COVID related absence, they will be prorated from the notebook grade. Labs on diversity cannot be exactly replicated on line but alternative exercises and assignments that will be graded will be posted on OAKS. A maximum of 2 missed labs will be accommodated for. You are responsible for missed material (i.e., if lab exercise cannot be set up on line (*), you must nevertheless read and learn from the handout). Note that no recorded lecture or lab will be made available for the duration of the course and all will be closed during testing periods. You must watch those recorded lectures and labs during the regular class or lab time and take notes as if you were in class. **Pending COVID status on campus or in class, if the course shifts to be on line, both the schedule and the format of the course (including tests) will be modified.**

**Honor Code and Academic Integrity:** Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to misunderstanding and confusion will be handled by the instructor. The instructor designs an intervention or assigns a grade reduction to help prevent the student from repeating the error. The response is recorded on a form and signed both by the instructor and the student. It is forwarded to the Office of the Dean of Students and placed in the student’s file. Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This status indicator will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent.

Students can find the complete Honor Code and all related processes in the *Student Handbook* at [http://deanofstudents.cofc.edu/honorsystem/studenthandbook/index.php](http://deanofstudents.cofc.edu/honorsystem/studenthandbook/index.php)

**Mental & Physical Wellbeing:** At the college, we take every student’s mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to student health services (843.953.5520). And if you find yourself experiencing any mental health challenges (for example, anxiety, depression, stressful life events, sleep deprivation, and/or loneliness/homesickness) please consider contacting either the Counseling Center (professional counselors at [http://counseling.cofc.edu](http://counseling.cofc.edu) or 843.953.5640) or the Students 4 Support (certified volunteers through texting "4support" to 839863 or visit [http://counseling.cofc.edu/cct/index.php](http://counseling.cofc.edu/cct/index.php)). You can also visit both on campus on the 3rd floor of Robert Scott Small. These services are there for you to help you cope with difficulties you may be experiencing and to maintain optimal physical and mental health.

**Center for Student Learning:** The Center for Student Learning’s (CSL) academic support services provide assistance in study strategies, speaking & writing skills, and course content. Services include tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at [http://csl.cofc.edu](http://csl.cofc.edu) or call (843) 953-5635.
Basic Concepts in Parasitism

Aug 24, 26  Associations
Parasites: an overview
No lab – Watch movie
“Infested! Living with parasites” (OAKS)

/Sept 31, 2  Life cycles: an overview
Adaptations to parasitism
Compound microscope calibration*
& Dispersal forms: Egg flotation*

7, 9  Arms race
Infection vs disease: Pathologies
Parasite ecology: Quantitative factors*

Starting On line – Lectures synchronous – Labs introductory lectures, exercises and assignments posted and
available each Thursday at noon - Assignments due by Sunday 11:59 pm.

14, 16  R: Quiz 1 – Control and associated challenges
I will post quizzes OL – available Thursdays
during lab, noon-6:30 pm instead of 15 min at the start
of lecture.
Post catch up lecture to make sure we are done with
the concept part of the course – I will set zoom
meetings with whole class on Friday 10 am and
Monday 1 pm to answer any questions

Major parasite diversity, ecology and epidemiology

21, 23  ‘Flagellates’
‘Flagellates’

28, 30  T- Quiz 2 - Apicomplexans
Amoebae & Apicomplexans

Oct 5, 7  Digeneans: Liver and intestinal flukes
Digeneans part 1

12, 14  Digeneans: Blood flukes
Digeneans: part 2
R: midterm test - available during class time

19  Fall break - No class
Dead line to choose a paper for presentation

21  Cestodes
Monogeneans & Cestodes

26, 28  Soil transmitted nematodes
Nematodes

Back to face-to-face teaching

/Nov 2, 4  The sushi worm
Other food borne nematodes
Parasite identification with a dichotomous key*
Added: Ascaris dissection (=Nematode cont’ *)
+ Set up demos throughout teaching lab with specimens from
previous diversity labs that will remain available until the end
of the semester.

9, 11  T: Quiz 3- Filarial nematodes
Host dissection: Collection of parasites*

Parasites and conservation biology

16, 18  Specificity and Emerging Diseases
Parasite identification: Use of molecular tools*

23  Catch up day

25  Thanksgiving Holiday. No class
No lab

/Dec 30, 2  T: Quiz 4 - Parasites as indicators of environmental health
Parasites as natural tags
R: Recorded Presentations due
Lab test

Dec 7  Tuesday Reading Day
Thursday Dec 9: 10-30 am - Final examination (comprehensive)
### Grading:

- **Quizzes:** 10% each (lowest dropped) = 30% total
- **Midterm test:** 20%
- **Final test:** 25% cumulative
- **Presentation:** 5%
- **Lab notebook/assignments:** 5%
- **Lab test:** 15%

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