

Eastern Illinois University  
**REVISED COURSE PROPOSAL**

Please check one: ☐ New course ☒ Revised course

**PART I: CATALOG DESCRIPTION**

1. **Course prefix and number, such as ART 1000:** BIO 4958
2. **Title (may not exceed 30 characters, including spaces):** Parasitology
3. **Long title, if any (may not exceed 100 characters, including spaces):** Parasitology
4. **Class hours per week, lab hours per week, and credit [e.g., (3-0-3)]:** 3 – 3 - 4
5. **Term(s) to be offered:** ☒ Fall ☐ Spring ☐ Summer ☐ On demand
6. **Initial term of offering:** ☒ Fall ☐ Spring ☐ Summer **Year:**
7. **Course description:** A study of parasitism as a symbiotic relationship; to include identification, systematics, life histories, pathology, and control of common parasites of animals, including humans.
8. **Registration restrictions:**
  - a. **Equivalent Courses**
    - **Identify any equivalent courses** (e.g., cross-listed course, non-honors version of an honors course). There are no equivalent courses.
    - Indicate whether coding should be added to Banner to restrict students from registering for the equivalent course(s) of this course. ☐ Yes ☐ No
  - b. **Prerequisite(s)**
    - **Identify the prerequisite(s)**, including required test scores, courses, grades in courses, and technical skills. Indicate whether any prerequisite course(s) MAY be taken concurrently with the proposed/revised course. BIO 1300G or permission of instructor.
    - Indicate whether coding should be added to Banner to prevent students from registering for this course if they haven't successfully completed the prerequisite course(s). ☒ Yes ☐ No

If yes, identify the minimum grade requirement and any equivalent courses for each prerequisite course: D
  - c. **Who can waive the prerequisite(s)?**  
☐ No one ☐ Chair ☒ Instructor ☐ Advisor ☐ Other (Please specify)
  - d. **Co-requisites** (course(s) which MUST be taken concurrently with this one):
  - e. **Repeat status:** ☒ Course may not be repeated.  
☐ Course may be repeated once with credit.  

Please also specify the limit (if any) on hours which may be applied to a major or minor.
  - f. **Degree, college, major(s), level, or class** to which registration in the course is restricted, if any: N/A

**g. Degree, college, major(s), level, or class** to be excluded from the course, if any: N/A

**9. Special course attributes** [cultural diversity, general education (indicate component), honors, remedial, writing centered or writing intensive] writing active

**10. Grading methods** (check all that apply): ☒ Standard letter ☐ CR/NC ☐ Audit ☐ ABC/NC  
("Standard letter"—i.e., ABCDF—is assumed to be the default grading method unless the course description indicates otherwise.)

**Please check any special grading provision that applies to this course:**

☐ The grade for this course will not count in a student's grade point average.

☐ The credit for this course will not count in hours towards graduation.

**If the student already has credit for or is registered in an equivalent or mutually exclusive course, check any that apply:**

☐ The grade for this course will be removed from the student's grade point average if he/she already has credit for or is registered in \_\_\_\_\_ (insert course prefix and number).

☐ Credit hours for this course will be removed from a student's hours towards graduation if he/she already has credit for or is registered in \_\_\_\_\_ (insert course prefix and number).

**11. Instructional delivery method:** (Check all that apply.)

☐ lecture ☐ lab ☒ lecture/lab combined ☐ independent study/research  
☐ internship ☐ performance ☐ practicum or clinical ☐ study abroad  
☐ Internet ☐ hybrid ☐ other (Please specify)

## **PART II: ASSURANCE OF STUDENT LEARNING**

**1. List the student learning objectives of this course:**

- a. If this is a general education course, indicate which objectives are designed to help students achieve one or more of the following goals of general education and university-wide assessment:**
- EIU graduates will write and speak effectively.
  - EIU graduates will think critically.
  - EIU graduates will function as responsible citizens.

- b. If this is a graduate-level course, indicate which objectives are designed to help students achieve established goals for learning at the graduate level:**
- Depth of content knowledge
  - Effective critical thinking and problem solving
  - Effective oral and written communication
  - Advanced scholarship through research or creative activity

Students will:

- identify characteristics and life histories of major eukaryotic parasites of animals  
(depth of knowledge, critical thinking)
- compare and contrast pathology and epidemiology associated with different transmission strategies  
(depth of knowledge, critical thinking)
- elucidate taxonomic relationships of parasitic groups and evolutionary pressures that gave rise to them  
from free-living ancestors (depth of knowledge, critical thinking, written communication)
- learn laboratory techniques for parasite recovery and diagnosis, including necropsy, slide preparation  
and staining, fecal exams (depth of knowledge, critical thinking, research)
- apply techniques learned in labs to prepare a collection of parasites  
(depth of knowledge, problem solving, written communication, research/creative activity)

**2. Identify the assignments/activities the instructor will use to determine how well students attained the learning objectives:**

	Midterm and Final Exams (50%)	Laboratory Exercises (35%)	Parasite Collection (15%)
identify characteristics and life histories of major eukaryote parasites	X	X	X
compare and contrast pathology and epidemiology	X		
elucidate taxonomic relationships	X	X	X
learn laboratory techniques		X	
prepare a collection of parasites		X	X

**3. Explain how the instructor will determine students' grades for the course:**

Course grade will be based on:

Midterm and final exams 50%, laboratory assignments 35%, parasite collections 15%.

**4. For technology-delivered and other nontraditional-delivered courses/sections, address the following:**  
N/A

**5. For courses numbered 4750-4999, specify additional or more stringent requirements for students enrolling for graduate credit. These include:**

- a. course objectives;
- b. projects that require application and analysis of the course content; and
- c. separate methods of evaluation for undergraduate and graduate students.

Students taking this course for graduate credit will be held to higher expectations and more stringent grading criteria. This will be evaluated on level of development of answers on exams (including take home portion of exam for graduate students) and laboratory exercises. Graduate students will be required to make a more extensive collection.

**6. If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. (See Appendix \*.)**

This course is writing active. There will be writing assignments in laboratory exercises and written exams are mainly short answer / essay format. Writing exercises will make up a significant portion of the final grade.

### PART III: OUTLINE OF THE COURSE

Units of time: Three fifty-minute lectures and 1 three-hour laboratory for 15 weeks.

<u>Week</u>	<u>Topic</u>	
1	Introduction / definitions / terms, parasitism as symbiotic relationship	
	Lab Ecology – application of terms and statistical analysis	
2	Parasitism as a life style – physiological, behavioral, and chemical adaptations	
	Lab Systematics	
3	Parasite ecology, immunoparasitology	
	Lab Diagnostic techniques	
4	Taxonomy and systematics	Exam 1
	Lab Parasite collection techniques	
5	Introduction to protozoan parasites, amoebae	
	Lab Parasite necropsies and collection	
6	Flagellates, Ciliates	
	Lab Amoebae, flagellates, ciliates	
7	Apicomplexans	
	Lab Apicomplexans	
8	Introduction to platyhelminthes	Exam 2
	Lab Protozoan lab practical	
9	Trematodes	
	Lab Platyhelminth morphology / anatomy, trematodes	
10	Cestodes	
	Lab Cestodes	
11	Introduction to Nematodes	
	Lab Parasite fixation, staining and specimen preparation	
12	Geohelminth Nematodes	Exam 3
	Lab Nematodes	work on collection
13	Nematodes, Acanthocephala	
	Lab Nematodes, Acanthocephala	work on collection
14	Introduction to parasitic arthropods, lice, diptera	
	Lab Diptera work on collection	
15	Mites, Ticks, bugs	
	Lab Practical exam	
16	final exam	

### PART IV: PURPOSE AND NEED

#### 1. Explain the department's rationale for developing and proposing the course.

This course has been traditionally offered as a 3 credit course and is being expanded to 4 credits to include parasitic arthropods. Parasitism is an important life history (there are more parasitic organisms than free-living forms). Many of these parasites cause significant disease in humans, domestic animals and wildlife. Students interested in medicine or wildlife disciplines need to be aware of these organisms.

a. **If this is a general education course, you also must indicate the segment of the general education program into which it will be placed, and describe how the course meets the requirements of that segment.** N/A

b. **If the course or some sections of the course may be technology delivered, explain why.** N/A

**2. Justify the level of the course and any course prerequisites, co-requisites, or registration restrictions.**

This course will take the place of BIO 3700 (Parasitology). It will be changed to 4750-4999 level to bring it into accord with other 4000 level courses (BIO 4964 Entomology, BIO 4954-Ornithology, BIO 4952-Herpetology, BIO 4950 -Ichthyology, and BIO 4956-Mammalogy).

**3. If the course is similar to an existing course or courses, justify its development and offering.**

a. **If the contents substantially duplicate those of an existing course, the new proposal should be discussed with the appropriate chairpersons, deans, or curriculum committees and their responses noted in the proposal.**

This course includes parasitic arthropods, which are also included in BIO 4964 (Entomology). Their role as disease causing agents and vectors is the emphasis in Parasitology rather than taxonomic relationships as in Entomology.

b. **Cite course(s) to be deleted if the new course is approved. If no deletions are planned, note the exceptional need to be met or the curricular gap to be filled.**

This course will replace BIO 3700 Parasitology.

**4. Impact on Program(s):**

This course will be an approved elective for undergraduate students in the Biological Sciences.

This course will be an approved elective for graduate students in the Biological Sciences.

**PART V: IMPLEMENTATION**

1. **Faculty member(s) to whom the course may be assigned:** The course will be taught by Dr. Jeffrey Laursen or any qualified member of the Biological Sciences Department.

2. **Additional costs to students:** \$ 10.00 laboratory fee (fee was previously approved by the President's Council for BIO 3700 and will be applied to BIO 4958 by substitution.)

3. **Text and supplementary materials to be used (Include publication dates):**

Roberts and Janovy. 2009. Foundations of Parasitology 8<sup>th</sup> edition

**PART VI: COMMUNITY COLLEGE TRANSFER**

**A community college course will not be judged equivalent to this course.**

**PART VII: APPROVALS**

**Date approved by the department or school: February 20, 2012**

**Date approved by the college curriculum committee: February 24, 2012**

**Date approved by CAA: CGS:**

\*In **writing-active courses**, frequent, brief writing activities and assignments are required. Such activities -- some of which are to be graded -- might include five-minute in-class writing assignments, journal keeping, lab reports, essay examinations, short papers, longer papers, or a variety of other writing-to-learn activities of the instructor's invention. Writing assignments and activities in writing-active courses are designed primarily to assist students in mastering course content, secondarily to strengthen students' writing skills. In **writing-intensive courses**, several writing assignments and writing activities are required. These assignments and activities, which are to be spread over the course of the semester, serve the dual purpose of strengthening writing skills and deepening understanding of course content. At least one writing assignment is to be revised by the student after it has been read and commented on by the instructor. In writing-intensive courses, students' writing should constitute no less than 35% of the final course grade. In **writing-centered courses** (English 1001G, English 1002G, and their honors equivalents), students learn the principles and the process of writing in all of its stages, from inception to completion. The quality of students' writing is the principal determinant of the course grade. The minimum writing requirement is 20 pages (5,000 words).

### Student Success Center

<http://www.eiu.edu/~success/>

**581-6696**



<http://www.eiu.edu/~counsctr/>

**581-3413**

### Career Services

<http://www.eiu.edu/~careers/>

**581-2412**

### Disability Services

<http://www.eiu.edu/~disabltv/>

**581-6583**