

# Bemidji State University

## **BIOL 4210: Parasitology**

### **A. COURSE DESCRIPTION**

Credits: 4

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

The biology of animal parasites, their identification, biochemistry, immunology, and epidemiology. Lecture and laboratory. Prerequisites: BIOL 1211, 1212, or consent of instructor.

### **B. COURSE EFFECTIVE DATES: 08/26/1997 - Present**

### **C. OUTLINE OF MAJOR CONTENT AREAS**

1. "Protozoa"- Euglenozoa, Retortamonada, Axostylata
2. Parasite ecology and evolution
3. Parasite epidemiology and immunology
4. "Protozoa"- Sarcodina
5. "Protozoa" form, function, classification
6. Kinetoplasta & other flagellates
7. Amoebas
8. "Protozoa"- Apicomplexa, Ciliophora, Fungi
9. Apicomplexa (Gregarines, Coccidia)
10. Malaria
11. Ciliophora
12. Mesozoa, Trematoda
13. Microspora & Myxozoa
14. Mesozoa & Intro to Platyhelminthes
15. Aspidobothrea & Trematoda form & function
16. Monogenea, Cestoda
17. Digenea
18. Cestoidea form, function & classification
19. Nematoda, form, function, and classification
20. Nematomorpha, Acanthocephala, Petostomida
21. Insecta (Hexapoda)
22. Arthropoda form, function, and classification
23. Crustaceans
24. Insecta
25. Pentastomida
26. Lice
27. Chelicerata
28. Hemiptera
29. Fleas
30. Diptera
31. Hymenoptera
32. Techniques
33. Ticks
34. Mites

### **D. LEARNING OUTCOMES (General)**

1. learn terminology and develop understanding of basic concepts of parasite ecology, evolution, form, function, and immunology.
2. learn identification, life cycles, epidemiology, distribution, and treatment of important human parasites and zoonoses.
3. learn necropsy and lab techniques to prepare slides for identification of different groups of parasites (as time allows).

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted