

**Biology 3403:001 & MC1/ 5407– Parasitology – Spring 2017**  
**Lecture M-W-F 11:00-11:50 WSB 101 (AMS 2)**  
**Lab (Alpine) M 1:00-2:50 WSB 109**  
**Lab (Midland) M 1:00-2:50 FOX 131**  
**Syllabus**

**Instructor:** Dr. Chris M. Ritzi

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Office hours: TR 2-4

MW 9-10

or by appt.

**MC Proctor:** Ethel Matthews

Fox 104

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**Class Website:** <http://sulross.blackboard.edu> and <http://faculty.sulross.edu/critzi/>

**Text:** Foundations of Parasitology. Ninth edition. Roberts, L.S., J. Janovy, Jr., and S. Nadler

**Course Description:** This course is designed to allow an exploration into the various aspects of parasitology. Emphasis will be placed on the life cycles of major parasitic organisms attacking humans and animals (wild and domestic). This course will not deal with viral or bacterial pathogens, as these are the covered by other courses in our curriculum). The following are the major objectives of the course:

1. To develop an understanding of and appreciation for the nature and evolution of parasitic associations.
2. To develop an understanding of the terminology used in parasitology.
3. To understand the ecology and life cycles of a variety of host-parasite associations.
4. To develop an understanding of the modifications (physiological, morphological, and behavioral) needed to assume a parasitic lifestyle.

**Student Learning Outcomes for Undergraduates in the Program**

The graduating biology student graduating with a BS in Biology should be able to:

- 1) Demonstrate an understanding of evolution by natural selection.
- 2) Demonstrate an integration of environmental awareness into everyday modern life.
- 3) Understanding how to incorporate molecular biology into the study of the whole organism.
- 4) Demonstrate utilization of various field techniques toward addressing scientific questions in the discipline.
- 5) Conduct basic laboratory experiments utilizing standard observational strategies.

**Student Learning Outcomes for Graduates in the Program**

The biology student graduating with a MS in Biology should be able to:

- 1) Understanding and implementation of scientific methodology.
- 2) Utilization of field techniques toward addressing scientific questions.
- 3) Be able to utilize statistics toward the analysis of data within the discipline.
- 4) Be able to effectively disseminate scientific findings using both written and oral communication.

**Grading:** Your grade will be assigned based on the percentage of points you get out of a total possible 900 points. (100pt lecture exams (2), final exam (200 pt), 100 pt lab exams (3), 100 pt disease report, and 100 pt attendance and participation).

**Tests:** There will be a total of 2 regular in-class exams, each worth 100 points. The final is two exams, a regular exam of material since the last test, and a comprehensive exam over the prior two exams. If you miss an exam and have a legitimate excuse, contact me within 24 hours of the test and we will arrange a

make-up test. If you do not contact me within 24 hours, you will receive a zero on that exam. Graduate students will be required to complete all undergraduate course requirements, and additionally complete research question take-home exams that will assess their ability to extrapolate the information beyond the lectures.

**Attendance:** Students missing 20% of lectures (9 lectures) AND/OR labs (3 labs) shall be dropped from the class per the SRSU catalog. Any student dropped for excessive absences will receive an F for the course grade. Please notify your instructor BEFORE missing class for authorized activities, death in the family, or illness. Exams missed for any reason must be made up within one week of the originally scheduled date. REGARDLESS OF WHY AN ABSENCE OCCURS, YOU MAY BE GIVEN AN F FOR THE COURSE GRADE IF YOU ACCUMULATE NINE ABSENCES.

**Students with disabilities will be provided reasonable accommodations. If you would like to request such accommodations because of physical, mental, or learning disability, please contact the ADA Coordinator for Program Accessibility at 837-8203, FH 112.**

**Lecture courtesy:** The general rules of classroom etiquette are below.

- 1) Please do not talk to others in class while the instructor is lecturing. If you have a question, ASK THE INSTRUCTOR! That's what I'm here for.
- 2) No eating, chewing, dipping, etc.
- 3) Please turn cell phones and pagers to silent while in class. They are disruptive to the entire class, and detract from learning.
- 4) Excessive tardiness and early departure are distracting to your fellow classmates, and can negatively impact your grade.

### TENTATIVE LECTURE OUTLINE

DATE	LECTURE TOPIC	CHAPTER
Jan 18	Introduction	1
Jan 20	Host-parasite relationships	2-3
Jan 23	Host-parasite relationships (continued)	2-3
Jan 25	Host-parasite relationships (continued)	2-3
Jan 27	Parasitic Protists	4
Jan 30	Trypanosomes (continued)	5
Feb 1	Trypanosomes (continued)	5
Feb 3	<i>Leishmania</i>	6
Feb 6	Trichomonads	6
Feb 8	<i>Giardia</i>	6
Feb 10	Amebas	7
Feb 13	Amebas (continued)	7
Feb 15	Intro to Apicomplexa	8
Feb 17	Apicomplexa – Coccidia thru Microspora	9, 11
Feb 20	Apicomplexa – Coccidia thru Microspora	9, 11
Feb 22	Exam I – Chapters 1-11	
Feb 24	Platyhelminthes – Flukes	13-15
Feb 27	Platyhelminthes – Flukes (continued)	15-16
Mar 1	Platyhelminthes – Flukes (continued)	17-18
Mar 3	Platyhelminthes – Tapeworms	20
Mar 6	Platyhelminthes – Tapeworms (continued)	20-21

Mar 8	Platyhelminthes – Tapeworms (continued)	21
Mar 10	Nematoda	22
Mar 13	Spring Break – No Class	
Mar 15	Spring Break – No Class	
Mar 17	Spring Break – No Class	
Mar 20	Nematoda (continued)	22-25
Mar 22	Nematoda (continued)	22-25
Mar 24	Nematoda (continued)	26-30
Mar 27	Nematoda (continued)	26-30
Mar 29	Exam II – Chapters 13-30	
Mar 31	Other Worms (Acanthocephala thru Pentastomida)	32&35
Apr 3	Other Worms (Acanthocephala thru Pentastomida)	32&35
Apr 5	Other Worms (Acanthocephala thru Pentastomida)	32&35
Apr 7	Arthropods – Crustaceans	33
Apr 10	Arthropods – Crustaceans	34
Apr 12	Arthropods –Intro to Insects	36
Apr 14	Insecta - Lice and true bugs	36-37
Apr 17	Insecta - Lice and true bugs (continued)	36-37
Apr 19	Insecta - Lice and true bugs (continued)	36-37
Apr 21	Insecta - Fleas	38
Apr 24	Insecta – Fleas (continued)	38
Apr 26	Acari - Mites	41
Apr 28	Acari – Mites and Ticks (continued)	41
May 1	Acari – Mites and Ticks (continued)	41
May 3	Acari – Mites and Ticks (continued)	41
May 5	Dead Day	
May 9 10:15 am	Exam III/Final Exam on Tuesday– Chapters 32-41 +	

Note – This outline is subject to change for reasons of course interest, time constraint, or instructor whim. The exams will be administered on the dates given, unless material relevant for a given exam has not been covered. Under such cases, an exam may be moved a class period or two to aid in the clarity and understanding of the material.