Course Number: BSC 497; CRN: 82898  
Course Title: Parasitology  
Fall 2015  

Instructors  
Lecture: Dr. Kodeeswaran Parameshwaran  
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<tr>
<th>Day</th>
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<td>Lecture: TR</td>
<td>9:30 am – 10:45 am</td>
<td>BA 338</td>
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Final Exam: TBA  

Office Hours, Location, Phone & E-mail:  
Monday & Wednesday: 10:00 – 12:00 pm  
or by appointment  

Office: Science # 201  
Phone: 903-468-8648  
Fax: NA  
E-mail: kparameshwaran@tamuc.edu  

UNIVERSITY STATEMENTS  
Academic Integrity  
By accepting this syllabus, you pledge to uphold the principles of Academic Integrity expressed by the Texas A&M University-Commerce Community. You agree to observe these principles yourself and to defend them against abuse by others. The first instance of cheating will result in an automatic zero on the exam and/or assignment. A second instance will result in a zero in the course. Cheating constitutes copying information from another student or non-allowable material as well as plagiarism. Plagiarism is a criminal activity. You must cite all sources of information. Copying of
material, whether parts of sentences, whole sentences, paragraphs, or entire articles, will result in a score of zero for your essay and can result in further disciplinary action.

Conduct Policy
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Student’s Guide Handbook, Policies and Procedures, Conduct)

Special Needs and Accommodations
Please advise the instructor of any special problems or needs at the beginning of the semester. The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Access to Student Work
Copies of your work in this course including copies of any submitted papers and your portfolios may be kept on file for institutional research, assessment and accreditation purposes. All work used for these purposes will be submitted anonymously.

University Policy on Weather Closings
Snow closings are generally announced on area television and radio stations. Unless otherwise advised by radio announcement or by official bulletins on the number listed above, students are expected to report for class as near normal time as possible on days when weather conditions are adverse. Decisions as to snow closing or delayed opening are not generally made before 5:00 AM of the working day. Students are expected to attend class if the University is not officially closed.

Textbook: There is no required text book for this course
**BROAD PURPOSE OF THE COURSE**
This course is designed for undergraduate students with a background in organismal biology, cell biology, ecology and chemistry. Therefore, this course provides students with a greater understanding of general concepts of parasitology. Initially basic types and concepts of animal associations will be discussed. We then will focus on the major groups of parasites, followed by parasite transmission, host immunity and pathology. There will also be a brief introduction to the potential beneficial use of parasites. Finally identification of parasites and treatment and control will be discussed.

**Student Learning Outcomes:**
Upon completion of this course you should be able to:
1. Discuss the concept of parasitism and other animal associations; explain the concept of harm; understand the basic features and characteristics of hosts.
2. Tell the advantages and disadvantages of parasitic life style; discuss the economic consequences of parasitic diseases and difficulties associated with eliminating/controlling parasitic diseases.
3. Tell the major types of protozoan parasites, their adaptive strategies and damage; discuss fungal and plant parasites.
4. Articulate major helminth and arthropod parasites, their taxonomy and harms caused.
5. Discuss the major means of transmission of parasites and the factors that influence parasite transmission.
6. Explain the host defense mechanisms against parasitic infections and mechanisms of co-infections (e.g. parasite HIV co-infection).
7. Articulate the types of pathology caused by parasites, pathological mechanism, factors influencing pathology and damage to specific organs.
8. Discuss about useful parasites.
9. Explain the importance of correct parasite identification and methods of identification.
10. Articulate the major aspects of controlling parasites and treating parasitic diseases.

**TEACHING METHOD**
Formal lectures will be supplemented with appropriate audiovisual materials, and home assignments. This is a lecture only course (no lab). I will post announcements on the home page of the course (eCollege) for reminders of important due dates in addition to announcing them in the class.

There will be three exams followed by a cumulative final. Questions for quizzes and exams are derived from the same Test Pool. Therefore some questions may be repeated.
**Attendance and Absences:** You are expected to attend ALL scheduled lectures and take the exams as scheduled. You will be held responsible for all information covered in lecture. There will be a 6 point credit for attendance. If a student fails to maintain a minimum of 80% attendance at ANY GIVEN TIME he/she will be dropped from the course. Excused absences as defined in the Student Handbook of the university will be accepted.

**Assignments and Quizzes:** At home questions will be assigned beginning in the second week of the course. Quizzes will be administered in the class. Full credit will be given to home assignments if they are turned in the same week (before Friday 5.00 PM CST). If they are done in the subsequent week it will be treated as a quiz.

**Exams:** Consist of multiple choice questions and short answer questions. Questions are drawn from the same test pool. Exams will be taken in class.

**Makeup Policy:** The student is responsible for requesting a makeup when they are unable to attend the regularly scheduled examination and must schedule the makeup within 2 days of the absence. Makeup exams will be scheduled only in the event of an EXCUSED absence (as defined in the Student’s Guidebook). If the test is not made-up, the student will receive a zero for that exam.

**GRADING SYSTEM**

**Grading scale:**
The final course letter grade will be assigned based upon the following breakdown:

- 90 - 100% = A  
- 80 - 89% = B  
- 70 - 79% = C  
- 60 - 69% = D  
- 00 - 59% = F

**Distribution:**
- Quiz = 24% (4 quiz; 6%/quiz)  
- Exams = 30% (3 exams; 10%/exam)  
- Attendance = 6%  
- Assignment = 10% (two; 5% for each)  
- Final Exam* = 30%

*Final exam is a comprehensive exam that will cover all the chapters.
**TOPICS COVERED**

Week 1: Meet and Greet

Chapter 1 – Animal associations: Introduction to animal associations; concept of harm; parasite hosts.

Week 2: Chapter 1 – Animal associations: parasitic life style; difficulties associated with treating and controlling parasitic diseases.

Week 3: Chapter 2 – Parasitic protozoa, fungi and plants: Parasitic protozoans; *Entamoeba* and other parasitic amoebas; Phylum Metamonada

Week 4: Chapter 2 – Parasitic protozoa, fungi and plants: Phylum Apicomplexa and Subclass Coccidiasnia

Week 5: Chapter 2 – Parasitic protozoa, fungi and plants: Phylum Kinetoplastida and Phylum Chlorophyta.

Week 6: Chapter 2 – Parasitic protozoa, fungi and plants: Kingdoms Fungi and Plantae.

Chapter 3 – Helminth parasites: Introduction; trematodes

Week 7: Chapter 3 – Helminth parasites: trematodes; Class Cestoda.

Week 8: Chapter 3 – Helminth parasites: Phylum Acanthocephala and Phylum Nematoda

Week 9: Chapter 4 – Arthropod parasites: introduction, Phylum Chelicerata

Week 10: Chapter 4 – Arthropod parasites: Phylum Crustacea and Subphylum Hexapoda

Week 11: Chapter 5 – Parasite transmission.
Week 12  Chapter 6 – Immune reactions and parasite infections.

Week 13  Chapter 7 – Pathology of parasite infections.

Week 14  Chapter 8 – Useful parasites.
            Chapter 9 – Parasite Identification.

Week 15  Chapter 10 – Parasite treatment and control.

Cumulative Final:  Thursday December 17th 2015, 8.00 AM – 10.00 AM.

*ALL DATES AND ASSIGNMENTS ARE TENTATIVE AND SUBJECT TO CHANGE*