

Syllabus BSC 497 Parasitology

Course Number: BSC 497; CRN: 81941

Course Title: Parasitology

Fall 2016

Class time: Tuesdays and Thursdays 11:00a-12:15p

Location: BA248

INSTRUCTOR

Lecture: Dr. Kodeeswaran Parameshwaran
Assistant Professor of Biomedical Sciences
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Face to Face Course

Office Hours, Location, Phone & E-mail:

Monday: 10:00 am – 12:00 pm
Wednesday: 9.30 am – 12.30 pm
or by appointment **only**

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Phone: 903-468-8648
Fax: 903-886-5997
E-mail: kparameshwaran@tamuc.edu

COURSE INFORMATION

Textbook: No specific textbooks required. No other specific requirements apply.

Course Description:

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

COURSE INFORMATION

Minimal Technical Skills Needed

Standard skills necessary to use web browsers to access course materials is required. Students should also be able to upload their work as necessary.

Instructional Methods

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 or announce them in the class, posted in eCollege or send email notifications.

Student Responsibilities or Tips for Success in the Course

Regular attendance

Submitting assignments before deadlines

If special accommodations need to be made notifying the instructor in advance

Checking both eCollege and emails for course related announcements

GRADING-OVERALL INFORMATION

Attendance and Absences: You are expected to attend **ALL** scheduled lectures and take the exams/quizzes as scheduled. **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.

Methods of Assessment

There will be three types of assessments that will contribute to the grade.

These are:

1. Quizzes
2. Exams
3. Assignments

There will be three exams followed by a cumulative final. There will be four quizzes. Exams and quizzes consist of multiple choice questions. Questions are drawn from the same test pool. Therefore some questions may be repeated. Students will take exams and quizzes in the classroom.

Assignments will be provided after the second week of the course. Full credit will be given to 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.

Important information

- 1.** There will not be any additional points extra credits. A student's grade will come only from the points he/she earns in the three types of assessments.
- 2.** All assignments should be submitted before the deadlines. Late submissions will automatically receive ZERO points.
- 3.** No requests to open the exams or quizzes earlier will be accepted.
- 4.** All requests for make-up exams/quizzes must accompany supporting documents (e.g. a doctor's note). Such requests should be made within two days after missing the exam/quiz. The reasons for not taking an exam/zero within the designated should be acceptable, as outlined in your student handbook. Forgetting to take the exam/quiz will not be an acceptable reason.

5. It is the students' responsibility to check emails and eCollege for exam/quiz dates and assignment postings & deadlines.

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.

TECHNOLOGY REQUIREMENTS

Important Disclaimer: You might not need all the requirements listed in this section for this particular course. A computer installed with an internet browser as specified below, Acrobat Reader and Microsoft Office is considered to be sufficient. A current security software (against virus, malware and other malicious contents) is also necessary.

To fully participate in online courses you will need to use a current Flash enabled internet browser. For PC and Mac users the suggested browser is Mozilla Firefox.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - o 512 MB of RAM, 1 GB or more preferred
 - o Broadband connection required courses are heavily video intensive
 - o Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - o Sound card, which is usually integrated into your desktop or laptop computer
 - o Speakers or headphones.

o *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site <http://www.java.com/en/download/manual.jsp>

- Current anti-virus software must be installed and kept up to date.

- Run a browser check through the Pearson LearningStudio Technical Requirements website. Browser Check

http://help.ecollege.com/LS_Tech_Req_WebHelp/en-us/#LS_Technical_Requirements.htm#Browset

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:

- o Adobe Reader <https://get.adobe.com/reader/>

- o Adobe Flash Player (*version 17 or later*) <https://get.adobe.com/flashplayer/>

- o Adobe Shockwave Player <https://get.adobe.com/shockwave/>

- o Apple Quick Time <http://www.apple.com/quicktime/download/>

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- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

- For additional information about system requirements, please see: System Requirements for LearningStudio

<https://secure.ecollege.com/tamuc/index.learn?action=technical>

ACCESS AND NAVIGATION:

Pearson LearningStudio (eCollege) Access and Log in Information

This course will be facilitated using Pearson LearningStudio, the learning management system used by Texas A&M University-Commerce. To get

started with the course, go to myLeo and from the top menu ribbon select eCollege. Then on the upper left side of the screen click on the My Courses tab. <http://www.tamuc.edu/myleo.aspx>

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: It is strongly recommended you perform a "Browser Test" prior to the start of your course. To launch a browser test login to Pearson LearningStudio, click on the My Courses tab, and then select the Browser Test link under Support Services.

Pearson LearningStudio Student Technical Support

Texas A&M University-Commerce provides students technical support for the use of Pearson LearningStudio.

Technical assistance is available 24/7 (24 hours, 7 days a week).

If you experience LearningStudio (eCollege) technical problems, contact the LearningStudio helpdesk at 1-866-656-5511 (toll free) or visit Pearson 24/7 Customer Support Site <http://247support.custhelp.com/>

The student help desk may be reached in the following ways:

Chat Support: Click on '*Live Support*' on the tool bar within your course to chat with a Pearson LearningStudio Representative.

Phone: 1-866-656-5511 (Toll Free) to speak with Pearson LearningStudio Technical Support Representative.

Accessing Help from within Your Course: Click on the '*Tech Support*' icon on the upper left side of the screen inside the course. Then you will be able to get assistance via online chat or by phone.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

Policy for Reporting Problems with Pearson LearningStudio

Should students encounter Pearson LearningStudio based problems while submitting assignments/discussions/comments/exams, the following procedure must be followed:

1. Students must report the problem to the help desk. You may reach the helpdesk at 1-866-656-5511.

2. Students must file their problem with the helpdesk and obtain a helpdesk ticket number

3. Once a helpdesk ticket number is in your possession, students should email me to advise me of the problem and provide me with the helpdesk ticket number.

4. I will call the helpdesk to confirm your problem and follow up with you

PLEASE NOTE: Your personal computer and internet access problems are not a legitimate excuse for filing a ticket with the Pearson LearningStudio Help Desk. Only Pearson LearningStudio based problems are legitimate reasons to contact the Help Desk.

You strongly are encouraged to check for your internet browser compatibility **BEFORE** the course begins and take the Pearson LearningStudio tutorial offered for students who may require some extra assistance in navigating the Pearson LearningStudio platform.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at myLeo. <https://leo.tamuc.edu>

Learner Support

The One Stop Shop was created to serve you by providing as many resources as possible in one location. <http://www.tamuc.edu/admissions/onestopshop/>
The Academic Success Center provides academic resources to help you achieve academic success.

<http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/>

FREE Mobile APPS

The Courses apps for phones have been adapted to support the tasks students can easily complete on a smaller device. Due to the smaller screen size course content is not presented.

The Courses app is free of charge. The mobile Courses Apps are designed and adapted for different devices.

iPhone – Pearson LearningStudio Courses for iPhone

Android – LearningStudio Courses - Phone

App Title:

iPhone - OS 6 and above

Operating System:

Android – Jelly Bean, Kitkat, and Lollipop OS

iPhone App URL:

<https://itunes.apple.com/us/app/pearson-learningstudio-courses/id977280011?mt=8>

Android App URL:

<https://play.google.com/store/apps/details?id=com.pearson.lsphone>

Once downloaded, search for Texas A&M University-Commerce, and it should appear on the list. Then you will need to sign into the myLeo Mobile portal. The Courses App for Android and iPhone contain the following feature set:

- View titles/code/Instructor of all Courses enrolled in online
- View and respond to all discussions in individual Courses
- View Instructor Announcements in individual Courses
- View Graded items, Grades and comments in individual Courses
- Grade to Date
- View Events (assignments) and Calendar in individual Courses
- View Activity Feed for all courses
- View course filters on activities
- View link to Privacy Policy
- Ability to Sign out
- Send Feedback

LearningStudio Notifications

Students can be alerted to course activities via text on their mobile phones or up to two email addresses.

Based on their preferences, students can automatically receive a push notification with every new: course announcement, threaded discussion post, grade, and/or assignment without having to login to the course. Enrolled students will automatically receive email notifications for announcements and can opt out of this feature. To receive text notifications, students must opt in. To begin setting up notifications, go into your course in LearningStudio and click on the bell-shaped Notifications icon on the main menu ribbon.

By default the student's university email address will appear. This cannot be changed in LearningStudio. Additional email addresses may be added by clicking the Add button. After all of the other selections are completed be sure to click the Save and Finish button.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

The instructor's communication response time and feedback on assessments are stated clearly.

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.

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to

(<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

More information is available in this link:

<http://www.tamuc.edu/academics/colleges/educationHumanServices/departments/educationalLeadership/important-information.aspx>

COURSE CALANDAR*

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:	<u>Chapter 2 – Parasitic protozoa, fungi and plants:</u> Parasitic protozoans; <i>Entamoeba</i> and other parasitic amoebas; Phylum Metamonada
Week 4:	<u>Chapter 2 – Parasitic protozoa, fungi and plants:</u> Phylum Apicomplexa and Subclass Coccidiasnia
Week 5:	<u>Chapter 2 – Parasitic protozoa, fungi and plants:</u> Phylum Kinetoplastida and Phylum Chlorophyta.
Week 6:	<u>Chapter 2 – Parasitic protozoa, fungi and plants:</u> Kingdoms Fungi and Plantae. <u>Chapter 3 – Helminth parasites:</u> Introduction; trematodes
Week 7:	<u>Chapter 3 – Helminth parasites:</u> trematodes; Class Cestoda.
Week 8:	<u>Chapter 3 – Helminth parasites:</u> Phylum Acanthocephala and Phylum Nematoda
Week 9	<u>Chapter 4 – Arthropod parasites:</u> introduction, Phylum Chelicerata
Week 10	<u>Chapter 4 – Arthropod parasites:</u> Phylum Crustacea and Subphylum Hexapoda
Week 11	<u>Chapter 5 – Parasite transmission.</u>
Week 12	<u>Chapter 6 – Immune reactions and parasite infections.</u>
Week 13	<u>Chapter 7 – Pathology of parasite infections.</u>
Week 14	<u>Chapter 8 – Useful parasites.</u> <u>Chapter 9 – Parasite Identification.</u>
Week 15	<u>Chapter 10 – Parasite treatment and control.</u>

Cumulative Final: Last week of the semester

*** Please check the academic calendar**

(<https://ems.tamuc.edu/MasterCalendar/>) for details on holidays and start and end dates of the current semester. First day of class is August 30, 2016.

*** ALL DATES AND CHAPTERS COVERED ARE TENTATIVE AND SUBJECT TO CHANGE.**