

PARASITOLOGY SYLLABUS (BIOL 4735)

Instructor: Dr. N.L. Penceo
Office: 115 Biology Building
Phone: 678-839-4036
Office Hours: T/R 10:00am - 12:00pm & 1:30pm - 3:30pm F 12:30pm - 2:00pm

PREREQUISITES

BIOL 2108 and BIOL 2108L (or BIOL 1108 and BIOL 1108L) with a minimum grade of C and BIOL 3310

COURSE DESCRIPTION

This course introduces students to the field of parasitology. Topics covered include parasite diversity, life cycles, host defense mechanisms, parasite evasion, host pathology, ecology, evolution, and control. The laboratory component of the course will examine parasites of medical and veterinary importance.

LECTURE MATERIALS

- Loker, Eric S. and Bruce V. Hofkin 2015. *Parasitology: A Conceptual Approach*, Garland Science, Taylor & Francis Group, New York and London. ISBN 978-0-8153-4473-5
- Desowitz, R.S. 1987. *New Guinea Tapeworms and Jewish Grandmothers: Tales of Parasites and People*, W.W. Norton and Company, New York. ISBN 978-0-393-30426-8
- Zimmer, C. 2000. *Parasite Rex: Inside the Bizarre World of Nature's Most Dangerous Creatures*, The Free Press, New York. ISBN 978-0-7432-0011-0

LAB MATERIALS

- Sullivan, John, T. 2009. *A Color Atlas of Parasitology* 8th ed. Available via Ward's Science. ISBN 0-9665807-7-X
- Loose leaf notebook/sketch pad with blank unlined pages
- You will be "assigned" a compound microscope; use this scope throughout the course; keep it clean & in good condition
- Microscope slides for study will be provided
 - Observe slides and return to appropriate trays
 - Report broken slides immediately (if slides "disappear" we will have to employ a complex and time consuming check-out procedure)

LEARNING OUTCOMES

Upon completion of this course you should be able to:

- Demonstrate an understanding of the diversity of parasites.

- Discuss the parasite-host relationship and describe the effects parasites have on their hosts.
- Describe the basic biology, physiology, morphology, life history, behavior, phylogeny and ecology of selected parasites.
- Recognize significant morphological characteristics for identification of parasites to the taxonomic group and the life history stage.
- Communicate effectively in class discussion and on written assignments.

ATTENDANCE POLICY

Regular attendance is strongly recommended. Participating in lecture gives you an opportunity to ask questions or discuss relevant, interesting topics. To excel in this course you will need to understand, integrate and apply information from lecture, lab, and reading material.

CELL PHONE POLICY

According to a March 2008 article in the *New York Times*, researchers found that after responding to email or text messages, it took the average person **more than 15 minutes** to re-focus on the "serious mental tasks" they had been performing before the interruption. Other research has shown that when people attempt to perform two tasks at once (e.g. following what's happening in class while checking text messages), the brain literally **cannot do it**. The brain has got to give up on one of the tasks in order to effectively accomplish the other. For this reason, I require you to turn off your cell phones or set them on silent mode when you are in class. You are **NOT** welcome to surf the web, check email, or receive/send text messages during class.

D2L (COURSE DEN)

Periodically, announcements containing important information regarding lecture will be sent to the entire class. Thus, it is your responsibility to check D2L for messages at least once every 24 hours. If you experience problems with D2L, you may seek assistance M-F 8am-5pm online@westga.edu or by phone 678-839-6248 or 1-855-933-8946. In addition, 24/7 assistance is available, 365 days a year at <https://D2Lhelp.view.us.edu>.

GRADING

Lecture exams (3)	50% of final grade	A = 90 - 100
Lab practicals (3)	40% of final grade	B = 80 - 89
Lab drawings	10% of final grade	C = 70 - 79
		D = 60 - 69
		F = 59 & below

Lecture exams will include multiple choice, matching, short answer, and discussion questions.

Lab practical questions will stress material specifically covered in lab, primarily morphology, taxonomy, host(s), and target organ. The questions will be asked from the specimens themselves; therefore, you will have to recognize the specimen and/or anatomical part indicated. For example, questions might read: "Name the genus and species of this organism" or "Identify the structure indicated by the pointer".

MAKEUP EXAMS

If an exam is missed, you must be able to document your reasons for missing the exam, and only extreme catastrophes will be considered as valid excuses.

EXTRA CREDIT / CURVING OF GRADES

No extra credit allowed; curving of grades is **NOT** an option - an 89.9 is a B, not an A.

UNIVERSITY OF WEST GEORGIA HONOR CODE

At the University of West Georgia, we believe that academic and personal integrity are based upon honesty, trust, fairness, respect and responsibility. Students at West Georgia assume responsibility for upholding the honor code. West Georgia students pledge to refrain from engaging in acts that do not maintain academic and personal integrity. These include, but are not limited to, plagiarism, cheating, fabrication, aid of academic dishonesty, lying, bribery or threats, and stealing.

The University of West Georgia maintains and monitors a confidential Academic dishonesty Tracking System. This database collects and reports patterns of repeated student violations across all the Colleges, the Ingram Library, and the School of Nursing. Each incidence of academic dishonesty is subject to review and consideration by the instructor, and is subject to a range of academic penalties including, but not limited to, failing the assignment and/or failing the course. Student conduct sanctions range from verbal warning to suspension or expulsion depending on the magnitude of the offense and/or number of offenses. **The incident becomes part of the student's conduct record at UWG.**

Additionally, the student is responsible for safeguarding his/her computer account. The student's account and network connection are for his/her individual use. A computer account is to be used only by the person to whom it has been issued. The student is responsible for all actions originating through his/her account or network connection. Students must not impersonate others or misrepresent or conceal their identities in electronic messages and actions.

AMERICANS WITH DISABILITIES ACT

Students with a documented disability may work with UWG Accessibility Services to receive essential services specific to their disability. All entitlements to accommodations are based on documentation and USG Board of Regents standards. If a student needs

course adaptations or accommodations because of a disability or chronic illness, or if he/she needs to make special arrangements in case the building must be evacuated, the student should notify his/her instructor in writing and provide a copy of his/her Student Accommodations Report (SAR), which is available only from Accessibility Services. *Faculty cannot offer accommodations without timely receipt of the SAR; further, no retroactive accommodations will be given.*

UWG EMAIL POLICY

University of West Georgia students are provided a MyUWG email account. The University considers this account to be an official means of communication between the University and the student. The purpose of the official use of the student email account is to provide an effective means of communicating important university related information to UWG students in a timely manner. It is the student's responsibility to check his or her email.

CREDIT HOUR POLICY

The University of West Georgia grants one semester hour of credit for work equivalent to a minimum of one hour (50 minutes) of in-class or other direct faculty instruction AND two hours of student work outside of class per week for approximately fifteen weeks. For each course, the course syllabus will document the amount of in-class (or other direct faculty instruction) and out-of-class work required to earn the credit hour(s) assigned to the course. Out-of-class work will include all forms of credit-bearing activity, including but not limited to assignments, readings, observations, exams and musical practice. Where available, the university grants academic credit for students who verify via competency-based testing, that they have accomplished the learning outcomes associated with the course that would normally meet the requirements outlined above (e.g. AP credit, CLEP, and departmental exams).

Lecture Topic and Exam Schedule - Spring 2015*

	<u>Day</u>	<u>Topic</u>	<u>Chapter</u>
JAN	5	Introduction	1
	7	Basic Principles & Concepts	2 & 3
	12	Parasitic Protists: Form, Function, Classification	4
	14	Kinetoplastids & other Flagellated Protists	5 & 6
	19	Holiday (no classes)	
	21	Amoebas & Apicomplexans I	7 & 8
	26	Apicomplexans II	9
	28	Parasitic Ciliates	10
FEB	2	EXAM I (Chapters 1, 2, 4 - 10)	
	4	Introduction to Platyhelminthes & Trematoda	13 & 15
	9	Trematoda: Flukes	16
	11	Trematoda: Flukes	17 & 18
	16	Monogeneans	19
	18	Cestodes: Form & Function; Tapeworms	20 & 21
	23	Nematoda: Form & Function; Trichinellida	22 & 23
	25	Nematodes: Hookworms & Intestinal Roundworms	25 & 26
MAR	2	Nematodes: Pinworms & Filarial Worms	27 & 29
	4	Nematodes: Guinea Worms	30
	9	EXAM II (Chapters 13, 15 - 23, 25 - 27, 29 & 30)	
	11	Acanthocephala	32
	23	Arthropoda: Form & Function	33
	25	Parasitic Crustaceans	34
	30	Parasitic Insects: Phthiraptera & Hemiptera	36 & 37
APR	1	Parasitic Insects: Siphonaptera	38
	6	Parasitic Insects: Diptera	39
	8	Parasitic Strepsiptera & Hymenoptera	40
	13	Parasitic Arachnids	41
	15	Graduate Student Presentations	

* This lecture schedule may be modified depending on the pace of the course.

DATES TO REMEMBER...

JAN	19	Holiday - no classes
FEB	27	Last day to withdraw with grade of W
MAR	16 - 20	Spring Break - no classes
APR	15	Last day of M/W classes
APR	22	FINAL EXAM (Wednesday, 2:00 PM - 4:30 PM)

Lab Topic and Exam Schedule - Spring 2015*

	<u>Day</u>	<u>Topic</u>
JAN	7	Microscope review
	14	Kinetoplastids & other Flagellated Protists
	21	Amoebas & Apicomplexans I
	28	Parasitic Ciliates
FEB	4	
	11	Trematoda: Flukes
	18	Cestodes: Form & Function; Tapeworms
	25	Nematodes: Hookworms & Intestinal Roundworms
MAR	4	Nematodes: Pinworms & Filarial Worms
	11	Acanthocephala
	25	Parasitic Crustaceans
APR	1	Parasitic Insects: Siphonaptera
	8	Parasitic Strepsiptera & Hymenoptera
	15	Grad Student Presentations

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