

Biology 4095: Independent Study in Microbiology (1 unit)
Point Loma Nazarene University
Fall 2019

Speak up for those who cannot speak for themselves, for the rights of all who are destitute.
Proverbs 31:8

Instructor: Dr. Dave Cummings (x2642, E-mail: davidcummings@pointloma.edu)
Time and place: Tuesdays 1:30-2:20 pm, Sator Hall 116
Book: Hotez (2013) *Forgotten People Forgotten Diseases*. ASM Press.
(ISBN 978-1-55581-874-6)
Office hours: Mon and Wed 2-4 pm or by appointment (Rohr Science room 176)

Course description: This course is designed to introduce the science student to the neglected tropical diseases (NTDs). Students will read one chapter per week from the book *Forgotten People, Forgotten Diseases* and meet for group discussion. The course is designed around the philosophy and strategy of Team-Based Learning (TBL).

Course learning outcomes (CLOs): By the end of the semester, students will be able to

- describe the neglected tropical diseases (NTDs);
- explain the impact of NTDs on global health and development;
- propose sociological, political, economic, and medical solutions to the NTDs.

Class schedule:

Date	Topic	Chapter
T 9/10	Introduction to the course	
T 9/17	Introduction to the NTDs	1
T 9/24	The unholy trinity	2
T 10/1	Schistosomiasis	3
T 10/8	The filarial infections	4
T 10/15	The blinding NTDs	5
T 10/22	The mycobacterial infections	6
T 10/29	The kinetoplastid infections	7
T 11/5	The urban NTDs	8
T 11/12	The NTDs of North America	9
T 11/19	Final thoughts	10-12
T 11/26	Thanksgiving break – no class	
T 12/3	Review session	1-12
T 12/10	Exam	1-12

Assessment and grading:

iRATs (50 pts) – Individual readiness assurance tests (iRATs) will be taken at the beginning of class each week. Each iRAT is a 5-question, multiple-choice quiz on the assigned reading for the week. 5 pts each.

tRATs (50 pts) – Team readiness assurance tests (tRATs) will be taken immediately after turning in the iRAT. As a team, students will take the same test as the iRAT, sharing the same score with one another. 5 pts each.

AFEs (100 pts) – Application-focused exercises (AFEs) will represent the majority of each class period. Your team will work through a guided discussion of the chapter and complete a set of questions for a shared grade. 10 pts each.

Exam (100 pts) – Individual students will take an open-book exam at the end of the semester.

Grade summary

iRATs	50
tRATs	50
AFEs	100
Exam	100
TOTAL	300

<u>Percentage range</u>	<u>Letter grade earned</u>
92-100%	A
90-91%	A-
88-89%	B+
82-87%	B
80-81%	B-
78-79%	C+
72-77%	C
70-71%	C-
68-69%	D+
62-67%	D
60-61%	D-
≤ 59%	F

*NOTE: Final percentages will be rounded to the nearest whole number and the letter grade assigned will be non-negotiable.

Additional information

PLNU Mission: To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Academic accommodations: While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic accommodations. At Point Loma Nazarene University, these students are requested to file documentation during the first two weeks of the semester with the Academic Support Center (ASC), located in the Bond Academic Center. This policy assists the University in its commitment to full compliance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. Once the student files documentation, the ASC will contact the student's instructors and provide written recommendations for reasonable and appropriate accommodations to meet the individual learning needs of the student.

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. See [Disability Resource Center](#) for additional information. Students with learning disabilities who may need accommodations should also discuss their needs with the instructor during the **first two weeks** of class.

Academic honesty: Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. As explained in the university catalog, academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. Violations of university academic honesty include cheating, plagiarism, falsification, aiding the academic dishonesty of others, or malicious misuse of university resources. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for a) that particular assignment or examination, and/or b) the course following the procedure in the university catalog. Students may appeal also using the procedure in the university catalog. See Academic Policies for further information.

FERPA policy: In compliance with federal law, neither PLNU student ID nor social security number should be used in publicly posted grades or returned sets of assignments without student written permission. This class will meet the federal requirements by distributing graded work individually and posting grades securely in Canvas. Also in compliance with FERPA, you will be the only person given information about your progress in this class unless you have designated others to receive it in the "Information Release" section of the student portal. See Policy Statements in the undergrad academic catalog.

Final examination policy: Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the Class Schedules site. No requests for early examinations or alternative days will be approved.

PLNU copyright policy: Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU attendance and participation policy: Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See [Academic Policies](#) in the Undergraduate Academic Catalog.

Attendance is required at all weekly sessions. Unexcused absences will result in lowering the final grade by 10 pts. After 2 absences, the student will be dropped from the course.

Excused absences are those that result from situations beyond the control of the student. These include (but are not limited to) personal illness, serious family illness or death, delayed flights, and sanctioned University events (athletics, debate team, etc.). Excused absences require some formal documentation such as a doctor's note, email from a coach, etc. Documentation must be provided directly to the instructor. Work done on a day for which you have an excused absence can be made up in a reasonable amount of time at the instructor's discretion.

Unexcused absences are those that are preventable by the student or are recreational in nature. These include (but are not limited to) oversleeping, forgetting to come to class, attending family functions (weddings, family trips, etc.), and personal leave days. Work performed on days for which you have an unexcused absence cannot be made up and points are forfeited.

**Please do not come to class if you are currently sick or have had a fever within the last 24 hours.

Respect for one another and for the instructor is essential for an effective classroom environment. You are expected to show respect to your classmates and instructors by:

- listening when others are speaking,
- refraining from discussing non-related issues during class,
- not belittling the opinions of others, even when you disagree.,
- refraining from texting, etc. during class.

Cell phones must be silenced before class begins. Texting is distracting to the instructor and other students. Please wait until after class or lab finishes to text.