



TPaIDA

“Humanitarian Service with a Human Experience”

Introduction to the Clinical Pathology and Basic Science of Infectious Diseases

Course Syllabus

Faculty/Supervising Personnel:

Dr. Lane Rolling, M.D., Director, Trauma and Infectious Disease
Dr. Sany Benites Villasante, M.D., Clinical Pathology
Dr. Yury Monteagudo, M.D., Obstetrics and Gynecology.
Dr. Jorge Galdos, M.D., Neonatology.
Dr. Marco Carrasco, M.D., Pediatrics.
Dr. Ludgardo Astorga, M.D., Pediatrics
Dr. Manuel Montoya, M.D., Infectious Disease.
Dr. Ramiro Hermoza, M.D., Surgery
Dr. Armando Eguchi M.D., Surgery
Dr. Jaime Vargas, M.D., Medicine
Dr. Mario Cornejo, M.D., Plastic Surgery, Director of Health
Dr. Ernesto Cazorla, M.D., Gastroenterología
Dr. Jose Renan, M.D., Cardiology
Dr. Mina Nelson, M. D., Trauma and Orthopedics
Dr. Carlos Caparo, M. D., Trauma and Orthopedics
Dr. Jose Fuentes, M.D., Neurosurgery
Dr. Percy Inga, M.D., Surgery
Dr. Moses Sihuinchá M.D., Infectious Disease,
Dr. Roberto Lazo M.D., Internal Medicine
Dr. Martín Chíncha, M.D., Internal Medicine
Dr. Jorge Danz M.D., Trauma,
Dr. Martín Díaz, M.D., Pediatrics
Biology, Violeta Zanoni

Course Description:

This course is designed for undergraduate students in the Biological Sciences, pre-medical, medical, and students in the health professions. Professionals interested in first-hand experience with tropical diseases are also encouraged to participate. This is a short, one week, highly intensive course designed to maximize didactic and practical learning. The course is designed to give students an awareness of worldwide healthcare needs and provide a practical educational experience.

Students will be introduced to the basic biology of viruses, bacteria, protozoa, fungi, and parasites and the diseases they cause in humans.

Learning strategies include; lecture, hands-on laboratory work, roundtable discussions, clinical case conferences, and field study.

This course is equivalent 3-4 college credits, depending on the school, 2 credits for lecture and 2 for lab.

Course Objectives:

1. Understand the basic pathology of infectious disease and the major organisms responsible for human infectious disease.
2. Understand the basic, clinical treatment of infectious disease.
3. Understand and respect the affects that infectious diseases have on the geopolitical and cultural climates of the world.
4. Understand the various approaches to basic science and clinical medicine in another culture.

Academic Content and Course Curriculum Hours:

<u>Activity</u>	<u>Hours</u>
Lecture	27.0
Roundtable	5.0
Case Conferences	4.0
Diagnostic Laboratory Rotation	4.0
Out-patient clinics and Ward Rounds	23.0
Evening Tutorials/Discussions	5.0
Special Activities	4.0
Examination	3.0
Total Contact Hours	75

Description of Teaching Formats:

Didactic lectures:

The traditional lecture format consists of: 2 hours each morning and 2.0 hours every afternoon. An additional two hours are presented during roundtable discussions.

Roundtable format:

Multiple presenters give sequential presentations on specific topics with ensuing discussion.

Diagnostic laboratory course:

Part of each day's laboratory block consists of didactic presentation pertaining to helminthology, protozoology, bacteriology, and mycology.

Laboratory practical:

Hands-on microscopy, preparation of blood films, gram stains, acid- fast stains, KOH preps, stool concentrations for O & P and triple stains.

Out-patient clinic and ward rounds:

8 hours each day performing ward rounds in either an outpatient clinic or at a subspecialty clinic. Clinical exposure is observations, interactive and in small groups. Each participant will experience each tropical subspecialty, observing highly illustrative patients. Students will have access to advanced diagnostics to assist in case confirmation rather than presumption only.

Course Schedule: (subject to change)

Topics to be covered include; basic biology of disease causing organisms – bacteria, fungi, protozoa, viruses, and helminthes.

December 12

Arrive in Cuzco

10:30 am – 6:30 pm, Rest and Relaxation. Adjust to Altitude

7:00 p.m., Meet faculty, Evening Discussions – Clinical orientation

December 13

8:00 – 1:00, Hospital rounds/clinical training

2:00 -4:00 p.m., Surgical Lab Group A

5:30 -8:00 p.m., Clinical Microbiology Lab Group A

5:30 -8:00 p.m., Clinic and Emergency room Group B, C and D

8:00 – 10:30 p.m., Evening Lecture – Introduction to general bacteriology, bacterial pathophysiology bacterial transmission and, Cell structure of bacteria, eukaryotes

Evening Roundtable case discussions

December 14

8:00 – 1:00, Hospital rounds/clinical training

2:00 -4:00 p.m., Surgical Lab Group B

5:30 -8:00 p.m., Clinical Microbiology Lab Group B

5:30 -8:00 p.m., Clinic and Emergency room Group A, C and D

8:00 – 10:30 p.m., Evening Lecture – Part 2 Introduction to general bacteriology, bacterial pathophysiology bacterial transmission

Evening Roundtable case discussions

December 15

8:00 – 1:00, Hospital rounds/clinical training
2:00 -4:00 p.m., Surgical Lab Group C
5:30 -8:00 p.m., Clinical Microbiology Lab Group C
5:30 -8:00 p.m., Clinic and Emergency room Group A, B and D
8:00 – 10:30 p.m., Evening Lecture, Introduction to parasitology, classification and general life Cycles.

Evening Roundtable case discussions

December 16

8:00 – 1:00, Hospital rounds/clinical training
2:00 -4:00 p.m., Surgical Lab Group D
5:30 -8:00 p.m., Clinical Microbiology Lab Group D
5:30 -8:00 p.m., Clinic and Emergency room Group A, B and C
8:00 – 10:30 p.m., Evening Lecture –, Part 2 Introduction to parasitology, classification and general life cycles.
Evening Roundtable case discussions

December 17

Jungle Trip and Clinic
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4:00 am Leave Cuzco to the Jungle
12:00 -6:00 p.m., Jungle Orientation and Clinic
7:30 pm – Return back to Cuzco,

December 18 **Free day**

December 19

8:00 – 10:00, Hospital rounds/clinical training
10:00 -12:00 p.m., Christmas Party Hospital Regional
1:00 – 4:30, Hospital rounds/clinical training
5:30 -7:00 p.m., Clinical Lab Results and Discussion
8:00 – 10:30 p.m., Evening Lecture –, Introduction to virus, classification and general viral diseases

Evening Roundtable case discussions

December 20

8:00 – 1:00 p.m., Hospital rounds/clinical training

2:00 –8:00, Hospital rounds/clinical training

8:00 – 10:30 p.m., Evening Lecture, Review of Course Lecture

Evening Roundtable case discussions

December 21

8:00 – 11:00, Examination, Programs ends

11:00 – Free Time

December 22

Fly back to the States

Merry Christmas