MLS 3350 Clinical Parasitology, Mycology and Virology
Winter Term 2018

Day/Time TR 3:00-4:15 pm
Location Human Health Building 1006

Instructor Christina Lim, MS, MLS(ASCP)SM
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Office Hours TR 12-1:00 pm HHB 5016

Course Description This course is designed to provide a thorough introduction to clinical parasitology, mycology, and virology. Topics covered include the growth and isolation requirements, identification and diagnostic characteristics, life cycle/reproduction stages, epidemiology, transmission, pathogenesis, virulence and control of the infectious agents.

Reference Texts
Bailey & Scott's Diagnostic Microbiology, 14th edition. P. Tille. ISBN 9780323354820
Parasitology and Mycology Lab Manuals (Provided in MLS 3360 lab)

Supplemental References
Diagnostic Medical Parasitology. 2016. Garcia. 6th edition
Clinical Virology. 2017. Richman, D.D., et al. 4th edition
Mycology Online https://mycology.adelaide.edu.au/
Current clinical journals, CDC and WHO websites

Course Objectives Upon completion of this course the student will achieve the ability to:

- Describe the taxonomy, structure, and classification of parasites, fungi, and viruses.
- Describe how specimens are processed for diagnosis of parasitic, fungal, and viral infections including appropriate specimen and collection techniques, staining, media for cultivation, and environments for incubation.
- Define and describe the different interactions between the host and the microorganism and analyze how these interactions influence the health of the human host.
- Identify the parasitic, fungal, and viral agents by their distinguishing morphologic characteristics.
- Describe the diseases and pathologic manifestations caused by the clinically significant parasites, fungi, and viruses, and explain the mechanism of their pathogenesis and virulence.
- Correlate patient signs and symptoms, life cycles and route of transmission with the correct microbial agent, and provide prevention methods.
- Determine the common antimicrobial agents used to treat infections by these microbial agents.
- Explain the importance of immunization in the control of viral infections.
- Discuss the importance of epidemiology in the diagnosis, control, and prevention of parasitic, fungal, and viral infections.
- Synthesize clinical, pathological, and laboratory data to make a basic diagnosis.

Grading: Points are achieved from successful completion of case studies, oral presentation, quizzes, and written exams. The case studies will either be an in-class group work or an on-line assignment. Class participation during the in-class case studies will account for 50% of the student's case study points. The oral presentation will be on a clinical case journal article assigned by the instructor and must be presented in-class. Written exams will be a mixture of multiple-choice and short answer questions. Exam objectives will be provided to guide your study.

Exams (4 x 100 points each)	400
Case Study (5 x 25 points each)	125
Oral Presentation	100
Oral Presentation Quizzes	55
Total points	680

Adjusted to percentile grading format

Class Policies

- The university policy will be explicitly followed regarding academic conduct including plagiarizing and cheating on exams and other in-class or online assignments. Refer to the academic conduct policy webpage for a detailed information.
- OU policy regarding add/drops will be followed. It is the student's responsibility to be aware of all OU deadline dates. (Link to Winter 2018 important dates).
- In accordance with professional behavior, regular class attendance and participation is expected. Students are expected to prepare for and take the exams at the scheduled date and time. Case studies must be turned in by the due date and time; assignments that are submitted after will **not** be graded.
- If you have technical issues in Moodle, contact the Moodle help desk first. They will notify me of the problem and we will work together to resolve the issue.

  ELIS Student page http://www2.oakland.edu/elis/page.cfm?id=2217

  Help Request Form http://www2.oakland.edu/elis/help.cfm?formname=moodle

Grading scale

Percent	Grade Point
97.00 - 100%	4.0
96.00 - 96.99	3.9
94.00 - 95.99	3.8
92.00 - 93.99	3.7
90.00 - 91.99	3.6
89.00 - 89.99	3.5
88.00 - 88.99	3.4
86.00 - 87.99	3.3
84.00 - 85.99	3.2
82.00 - 83.99	3.1
80.00 - 81.99	3.0

Percent	Grade Point
79.00 - 79.99	2.9
78.00 - 78.99	2.8
77.00 - 77.99	2.7
76.00 - 76.99	2.6
75.00 - 75.99	2.5
74.00 - 74.99	2.4
73.00 - 73.99	2.3
72.00 - 72.99	2.2
71.00 - 71.99	2.1
70.00 - 70.99	2.0
69.00 - 69.99	1.9

Percent	Grade Point
68.00 - 68.99	1.8
67.00 - 67.99	1.7
66.00 - 66.99	1.6
65.00 - 65.99	1.5
64.00 - 64.99	1.4
63.00 - 63.99	1.3
62.00 - 62.99	1.2
61.00 - 61.99	1.1
60.00 - 60.99	1.0
0.00 - 59.99	0

MLS 3350 Lecture Schedule

Schedule by Week	Topics and Assessments
Week 1 1/1	• Introduction to Parasitology • Laboratory Diagnosis of Parasitic Infections
Week 2 1/8	• Ciliates and Flagellates • Intestinal and Tissue Amebae • Case Study
Week 3 1/15	• Apicomplexa • Blood and Tissue Protozoa • Case Study
Week 4 1/22	• Nematodes (Roundworms) - Tuesday Jan. 23 • Parasitology Exam 1 Thursday Jan. 25 (Covers all lectures from Weeks 1-3)
Week 5 1/29	• Trematodes (Flukes) • Cestodes (Tapeworms)
Week 6 2/5	• Arthropods • Case Study • Oral Presentations Thursday Feb. 8
Week 7 2/12	• Oral Presentations Tuesday Feb. 13 • Parasitology Exam 2 Thursday Feb. 15 (Covers all lectures from Weeks 4-6)
Week 8 2/19	Winter Recess
Week 9 2/26	• Introduction to Mycology • Laboratory Diagnosis of Fungal Infections • Superficial and Cutaneous Mycoses
Week 10 3/5	• Subcutaneous Mycoses • Systemic Mycoses • Case Study
Week 11 3/12	• Opportunistic Mycoses • Yeast Infections • Mycotoxins
Week 12 3/19	• Oral Presentations Tuesday Mar. 20 • Mycology Exam Thursday Mar. 22
Week 13 3/26	• Introduction to Virology • Lab Diagnosis of Viral Infections • DNA Viruses
Week 14 4/2	• RNA Viruses Part I • RNA Viruses Part II
Week 15 4/9	• Retroviruses, Hepatitis Viruses, Prions • Case Study
Week 16 4/19 Thursday	• Virology Exam noon-3:00 pm