

MLS 3360 Clinical Parasitology, Mycology, and Virology Lab
Winter Term 2018

Day/Time T/R 4:30-7:00 pm
Location Human Health Building 5016

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Required Texts: Parasitology and Mycology Lab Manuals (provided on Moodle)

Course Description: Laboratory to accompany MLS 3350. Includes a thorough study of the morphology of human parasites and fungi, and laboratory procedures such as staining methods and specimen collection and processing.

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

- Properly use a microscope and determine the correct objectives required to visualize parasitic and fungal structures
- Explain the advantages and disadvantages of using these methods in the diagnosis of fecal parasites: direct wet mount, fecal concentration, permanent stained smears
- Describe the types and stages of parasites to expect based on the specimen type
- Compare the general characteristics of the major phyla of human parasites
- Define and describe the anatomical and morphological structures of parasites and fungi
- Identify parasitic and fungal agents by their distinguishing morphological characteristics
- Correlate the transmission factors, appropriate specimen for diagnosis, and disease states with the corresponding parasitic and fungal agents.
- Describe the principle of the lactophenol cotton blue prep used to microscopically identify fungi in human specimens
- Demonstrate proper microbiology lab safety practices by following universal precautions, proper usage of PPE, hand washing, and aseptic techniques.
- Demonstrate professionalism through attendance, participation in group and class discussions, and finishing work on time.

Class Policies

- In accordance with professional behavior, attendance to all the labs is expected. Notify the instructor ahead of time if you are unable to attend a lab session. Students are expected to come to the labs prepared and on time.
- 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 important dates](#)).

Grading Points are achieved from successful completion of graded exercises listed below. Practical and final exams cannot be taken early or made up.

Lab Exam (3 x 100 each)	300
Parasitology Unknowns	100
Mycology Unknowns	100
Lab Worksheets	100
Total points	600

Adjusted to percentile grading format

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 3360 Laboratory Schedule

Schedule by Week	Topics and Assessments
Week 1 1/1	No lab
Week 2 1/8	Parasitology Lab 1 Introduction, Specimen collection, Identification of Ciliates and Flagellates
Week 3 1/15	Parasitology Lab 2 Identification of Intestinal and Tissue Amebae
Week 4 1/22	Parasitology Lab 3 Identification of Apicomplexa and Blood Flagellates
Week 5 1/29	- Exam 1 covering Parasite Labs 1-3 - Parasitology Lab 4 Identification of Roundworms
Week 6 2/5	Parasitology Lab 5 Identification of Flukes
Week 7 2/12	Parasitology Lab 6 Identification of Tapeworms, Identification of Arthropods
Week 8 2/19	Winter Recess
Week 9 2/26	- Exam 2 covering Parasite Labs 4-6 - Parasitology Unknowns - Parasitology Lab Worksheets Due
Week 10 3/5	Mycology Lab 1 Introduction, Specimen Collection, Identification of Dermatophytes
Week 11 3/12	Mycology Lab 2 Identification of Dimorphic Fungi and Agents of Mycetoma
Week 12 3/19	Mycology Lab 3 Identification of Septate, Hyaline, Opportunistic Fungi
Week 13 3/26	Mycology Lab 4 Identification of Dematiaceous Opportunistic Fungi, Identification of Zygomycetes
Week 14 4/2	- Exam 3 covering Myco Labs 1-4 - Mycology Unknowns - Mycology Lab Worksheets Due