

Course Syllabus No. 2740252 Spring 2026

Name of the Course: Eukaryotic Pathogens ,Credit Points: 2

Course teaching staff

Course Coordinator:

Prof. Serge Ankri

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Contact Information:

Student Reception by appointment

Additional Instructors in the Course:

Prof. Benjamin Horwitz

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Dr. Emily Avitan-Hersh

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Course structure and times

Course Schedule:

Lectures: Wednesday 08:30-10:30

Thursdays 09:30-11:30

Lectures will be given in the RED amphitheater.

Exams

Exam Date Moed A : **02.08.2026**

Exam Date Moed B : **27.08.2026**

Course attendance

Course Attendance:

Attendance in lectures is highly recommended.

pre-course requirements

Prerequisites for the Course:

General Genetics 2740165, General Biochemistry 2740241

Recommended resources for the course:

Murray, Patrick R., Rosenthal Ken S., Pfaller Michael: "Medical Microbiology,"

Elsevier Mosby, Eighth Edition (2016) or Ninth Edition (2021).

Overarching goal:

To learn about the most significant eukaryotic pathogens to humans. The course is divided into two parts: Parasites and Fungi.

Objectives: By the end of the course, the students will:

1. Compare medically important parasites from the protozoa and helminth groups, evaluating their respective chemotherapy, virulence mechanisms and immunology of parasitic diseases, and analyzing diagnostic and epidemiological aspects and the importance of parasites in Israel and around the world.
2. Analyze the fungal structure, physiological characteristics, and host-fungus relationships, distinguishing major groups of fungal diseases, their modes of transmission, host response, and methods of diagnosis and treatment.
3. Examine the mechanisms of action of antifungal agents, evaluating their effectiveness in combating fungal infections.

The Lecture topics in the course according to the weeks of the semester

Date	Subject of the lecture	Name of lecturer	Chapters in the course textbook
9:30-11:30 04.06.2026	Introduction to Parasitology, Tapeworms (Cestoda)	Prof. Serge Ankri	9 th ed. Section 7. Chapter 67,68,69,70,71, 76
8:30-10:30 10.06.2026	Trematoda and diseases caused by them.	Prof. Serge Ankri	9 th ed. Section 7. Chapter 67,68,69,70,71, 75
9:30-11:30 11.06.2026	Introduction to Mycology, Fungal cell structure. Importance of fungi in medicine and types of mycoses. Fungal growth, metabolism and reproduction.	Prof. Benjamin Horwitz	8 th & 9 th ed. Chapter 57, 58, 59
8:30-10:30 17.06.2026	Sexual and non-sexual reproduction in Fungi	Prof. Benjamin Horwitz	8 th & 9 th ed. Chapter 57
9:30-11:30 18.06.2026	Roundworms (Nematoda) and diseases caused by them.	Prof. Serge Ankri	9 th ed. Section 7. 67,68,69,70,71, 74
8:30-10:30 24.06.2026	Protozoa	Prof. Serge Ankri	9 th ed. Section 7. Chapter 72-73
9:30-11:30 25.06.2026	Protozoa	Prof. Serge Ankri	9 th ed. Section 7. Chapter 73
8:30-10:30 01.07.2026	Superficial mycoses; Candidiasis. Cutaneous mycosis	Dr. E. Avitan-Hersh	8 th & 9 th ed. Chapter 62
9:30-11:30 02.07.2026	Endemic systemic mycoses	Dr. Michal Meir	8 th & 9 th ed. Chapter 64
8:30-10:30 08.07.2026	Subcutaneous mycoses and opportunistic infections	Dr. E. Avitan-Hersh	8 th & 9 th ed. Chapter 62-63
9:30-11:30 09.07.2026	Antifungal agents and their mechanisms of action.	Dr. E. Avitan-Hersh	8 th & 9 th ed. Chapter 61
8:30-10:30 22.07.2026	Protozoa	Prof. Serge Ankri	9 th ed. Section 7. Chapter 72

Teaching Methods: Combined Clinical cases learning, inverted classroom and Lecture-based instruction

Assessment Tools: Final exam Grade Structure in the Course: Final exam: 100% (grade out of 100)

Exam format Multiple choice questions

Number of questions: 40 questions (20 questions for the Parasitology part and 20 questions for the Mycology part)

Exam duration time: 90 minutes

Students must pass the final exam with a grade of 55 in order to receive a passing grade in the course