

01:146:328 Human Parasitology

Spring 2023 semester, January 17 to May 10, 2023

Mon & Thu 8:30 AM to 9:50 AM at Tillett 232, in person instruction

Instructor: Dunne Fong, B424 Nelson Bio Labs, Rutgers University, 604 Allison Rd, Piscataway, NJ 08854-8082. Office phone 848 445 5268; Fax 732 445 5870; Email: fong@biology.rutgers.edu

Office Hours: Mondays 1.30-2.30 PM or by appointment (via Zoom)

Course Learning Goals: 2 areas of concentration: (1) Molecular cell biology of human parasites: protozoa and helminthes; (2) Relations between human parasites and COVID-19

CBN Departmental Learning Goals:

1. Master factual and conceptual knowledge in cell biology and neuroscience that will provide a solid foundation for success in advanced training and professional careers.
2. Develop an ability to summarize, integrate and organize information.
3. Use scientific reasoning to evaluate the potential for current research and new discoveries to improve our understanding of cell biology and neuroscience and its relevance to human health and to our society.

Textbook: D. Fong & M. M. Chan (2022) *Human Parasites: from Organisms to Molecular Biology*, ISBN 978-981-123-626-6 (hardcopy), 978-981-123-627-3 (ebook) World Scientific

Additional Course Materials: Original articles, papers and reviews, will be posted on the Canvas course site for interested students

Course Grade: Course grades will be based on 3 non-cumulative 80 min exams. The third exam will be taken during the final exam period (date and time to be announced). These exams will consist of multiple choice questions that require an understanding of the basic biology of parasitic organisms in addition to the ability to apply critical thinking to problems in parasitology.

Students who require special accommodations must make arrangements at least one week in advance with the instructor. These accommodations will be given only if approved by the Office of Disability Services.

Exams cannot be rescheduled or retaken. Individual exceptions for rescheduling will possibly be made only in cases of documented serious, long-term illness or family emergency or for Rutgers approved activities. Only one makeup exam may be taken during the semester.

Grading Scale:

A:	89.5% - 100%
B+:	84.5% - 89.4%
B:	79.5% - 84.4%
C+:	64.5% - 79.4%
C:	49.5% - 64.4%
D:	39.5% - 49.4%
F:	< 39.5%

Class Schedule:

Thu Jan 19	Human parasites and neglected tropical diseases (NTDs) (Chapter 1)
Mon Jan 23	Parasite evolution (Chapter 2)
Thu Jan 26	Parasite immunity (Chapter 3)
Mon Jan 30	Parasite classification (Chapter 4)
Thu Feb 2	Trypanosomiasis (Chapter 5)
Mon Feb 6	Leishmaniasis (Chapter 5)
Thu Feb 9	Giardiasis, trichomoniasis (Chapter 6)
Mon Feb 13	Amoebiasis (Chapter 7)
Thu Feb 16	Balantidiasis, Blastocystis infections (Chapter 8) / Review
Mon Feb 20	Exam 1 (Chapters 1 to 8)
Thu Feb 23	Malaria I (Chapter 9)
Mon Feb 27	Malaria II (Chapter 9)
Thu Mar 2	Babesiosis, toxoplasmosis, other apicomplexans (Chapter 10)
Mon Mar 6	Trematodes (Chapter 11)
Thu Mar 9	Schistosomiasis (Chapter 12)
Mon Mar 13	NO CLASS, SPRING BREAK
Thu Mar 16	NO CLASS, SPRING BREAK
Mon Mar 20	Fascioliasis, clonorchiasis, paragonimiasis (Chapter 13)
Thu Mar 23	Cestodes (Chapter 14)
Mon Mar 27	Taeniasis, diphyllbothriasis, hymenolepiasis (Chapter 15)
Thu Mar 30	Juvenile tapeworms (Chapter 16) / Review
Mon Apr 3	Exam 2 (Chapters 9 to 16)
Thu Apr 6	Nematodes (Chapter 17)
Mon Apr 10	Lymphatic filariasis (Chapter 18)
Thu Apr 1	Loiasis, onchocerciasis, dracunculiasis (Chapter 19)
Mon Apr 17	Soil-transmitted helminthes (Chapter 20)
Thu Apr 20	Strongyloidiasis, trichinellosis, enterobiasis (Chapter 21)
Mon Apr 24	Juvenile nematodes (Chapters 21 & 22)
Thu Apr 27	Arthropods (Chapter 23)
Mon May 1	Outlook of NTDs and parasitic diseases (Chapter 24) / Course comments
TBA	Exam 3 (Chapters 17 to 24)

Policies:

Course Closed?

If this course is closed, please use the appropriate form to add your name to the wait list at <https://biology.rutgers.edu/> (at the bottom of this website). If you have any questions, please contact the Division of Life Science - Office of Undergraduate Instruction at b112@dls.rutgers.edu, access the OUGI virtual front desk at <https://biology.rutgers.edu/40-biological-sciences/advising/478-ougi-front-desk> or visit the undergraduate instruction office at Nelson Labs B112, Busch Campus.

Academic Integrity Policy:

Rutgers University takes academic dishonesty very seriously. By enrolling in this course, you assume responsibility for familiarizing yourself with the Academic Integrity Policy and the possible penalties (including suspension and expulsion) for violating the policy (<http://academicintegrity.rutgers.edu/academic-integrity-policy>). As per the policy, all suspected violations will be reported to the Office of Student Conduct. Academic dishonesty includes (but is not limited to):

- *Cheating*
- *Plagiarism*
- *Aiding others in committing a violation or allowing others to use your work*
- *Failure to cite sources correctly*
- *Fabrication*
- *Using another person's ideas or words without attribution, including re-using a previous assignment*
- *Unauthorized collaboration*
- *Sabotaging another student's work*

If you are ever in doubt, consult your instructor.

Student-Wellness Services:

Just In Case Web App

<http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884

17 Senior Street, New Brunswick, NJ 08901

www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Crisis Intervention:

<http://health.rutgers.edu/medical-counseling-services/counseling/crisis-intervention>

Report a Concern: <http://health.rutgers.edu/do-something-to-help>

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181

3 Bartlett Street, New Brunswick, NJ 08901

www.vpva.rutgers.edu

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800

Lucy Stone Hall, Suite A145, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854

<https://ods.rutgers.edu>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555

<http://www.scarletlisteners.com>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.

** All information is subject to change at the discretion of the instructor.