



THE MODULE HANDBOOK

FACULTY OF BIOLOGY

Parasitology

Module code	BIO 21301
Module level	Undergraduate
Abbreviation, if applicable	-
Sub-heading, if applicable	-
Courses included in the module, if applicable	-
Semester/term	Even
Module coordinator(s)	Soenarwan Hery Poerwanto, S.Si., M.Kes.
Lecture(s)	1. Soenarwan Hery Poerwanto, S.Si., M. Kes. 2. Dra. Rr. Upiek Ngesti Wibawaning Astuti, DAP.&E., M.Kes. 3. Dila Hening Widyarini, S.Si., M.Sc.
Language	Indonesia
Classification within the Curriculum	Elective course
Teaching format/ class hours per week during the semester	This course consists of 2 credits of theory and 1 credit of practice and is planned to have 13 to 14 learning weeks excluded midterm and final examination. Evaluation of laboratory work will be held in the end of laboratory work schedule. The capacity of classroom should be for 40-60 students. The material will be delivered with combined between SCL, TCL, and case study.
Workload	Estimated working hour: 9 hours/week
Credit points	2-1 credits
Requirements	Animal Systematics (BIO 31101)
Learning goals/ competencies	1. Work ability <ol style="list-style-type: none">Plan, implement, analyze, and report on the experimental scientific / research in the field Parasitology.Using information and communication technology in learning.Working in groups in the laboratory and field. 2. Mastery of knowledge <ol style="list-style-type: none">Understand the basic concepts of diversity of parasitic organism and its role in the ecosystem.



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- b. Mastering and applying scientific methods in the field of Parasitology.
- c. Analyze and solve a problem and to develop problem-solving design and research activities about parasitic organisms.

3. Authority and responsibility

- a. Perform based communications technology effectively, whether written, oral, and with images relating Parasitology.
- b. Implement and integrate a branch of biology (especially Parasitology) into another branch.
- c. Able to anticipate problems in the field Parasitology.

Content

Parasitology (BIO 21301) to learn about parasitic organisms. Mainly discusses the grouping remains of parasites, Parasitism, and the scope of parasitism, physiology (life cycle, reproduction, behavior), pathology, symptoms of disease, epidemics, ecological bodies of the parasite. Learning Materials or Subject consists of Intestinal and Atrial Protozoa, Blood and Tissue Protozoa, Trematodes of Intestinal and Liver Parasites, Trematode of blood and lungs parasites, Intestinal Cestodes (Pseudophyllidea and Cyclophyllidea, Nematodes of Intestinal parasites and larva migrans, Immunoparasitology and Vaksin (The reaction of the host cell, the host response, and adaptation of the parasite praadaptasi various aspects of the immune parasitic aspect), Grouping Arthropods as agent / cause of the diseases, as host and vector of parasitic diseases and how to control, Crustaceans and Arachnida are detrimental to humans, Collection Methods of Organisms Parasites and Disease Vector - Reservoir of Diseases, Molecular Biology of Tropical Diseases. In line with the progress of science has developed studies using molecular techniques in various fields of science. For it was on this course are also given an explanation of the development and application of molecular biology in examination techniques and applications of molecular parasites that have been applied to the diagnosis and detection of parasitic diseases. In addition, students are also given the task of making paper or paper independently. Parasitology an elective courses for students of Biology Faculty. Students are required to attend classes with weights 2 credits and practicum with weights 1 Credit to increase knowledge and skills in dealing with helminthes. This course consists of 13 subjects with the number of meetings 14-16 times per semester. Learning methods by implementing Student Centered Learning (SCL) combined with the Student Teacher Aesthetic Role-Sharing (STAR) with improved interactive communication between teacher and students



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	and a teacher as a facilitator and partner learning for students in a harmonious atmosphere. STAR also apply patrap Three Realms, namely Ing ngarsa sung tuladha (exemplary), Ing Madya Mangun Karsa (empowering and motivating) and Tut Wuri Handayani (control and motivate students for succeed).
Study/exam achievements	1. Theory <ol style="list-style-type: none">Midterm: 35%Final examination: 35%Presentation, attendance and activity: 30% 2. Laboratory Work <ol style="list-style-type: none">Weekly test: 20 %Laboratory activity: 10 %Laboratory report: 40 %Final test: 30 %
Forms of media	White board, LCD, Atlas of Parasites, chart and book of parasites identification
Literature	<ol style="list-style-type: none">Zaman,V. 1987. Atlas Parasitologi Kedokteran.Chatterjee KD. 2009. Parasitology: Protozoology and Helminthology. 13th ed. CBS Publishers and Distributors PVT.LTD. New Delhi.Parasitologi Kedokteran, 2016, Sutanto Dkk., FKUIAsh, LR. and T.C. Orihel. 1980. Atlas of Human Parasitology. American Society of Clinical Pathologists Publ. Chicago.Brown, H W. 1979. Dasar Parasitologi Klinis (terjemahan). Penerjemah: Bintari Rukmono dkk.PT Gramedia. Jakarta.Cook, G.C. 1996. Manson's Tropical Disease. 12th ed. London. W. B. Saunders Company Ltd.Noble, E.R and Noble G.A. 1989. Parasitologi: Biologi Parasit Hewan. Gajah Mada University Press. Yogyakarta.The Biology of Parasites. 2017. Lucius et al. Wiley VCH.