

THE MODULE HANDBOOK

FACULTY OF BIOLOGY

## Entomology

Module code	BIO 41201
Module level	3 <sup>rd</sup> year of Undergraduate Program in Biology
Abbreviation, if applicable	-
Sub-heading, if applicable	-
Courses included in the module, if applicable	-
Semester/term	Even
Module coordinator(s)	Drs. Ignatius Sudaryadi, M.Kes.
Lecture(s)	<ol> <li>Drs. Ignatius Sudaryadi, M.Kes.</li> <li>Dr. Siti Sumarmi</li> <li>Dr. R.C. Hidayat Susilohadi, M.S.</li> <li>Drs. Hari Purwanto, M.P., Ph.D.</li> <li>Sukirno, S.Si., M.Sc., Ph.D.</li> </ol>
Language	Indonesia
Classification within the Curriculum	Elective course
Teaching format/ class hours per week during the	This course is organised into 1 class and planned to have 13 to 14 teaching weeks and 2 – 3 weeks of examination.
semester	The course was scheduled every Monday at 07:15 am at Ruang Biodas Bawah Timur. The lecture will be delivered using both teaching and student center learning. At the last two weeks of lectures, the students should present their review project on the international published paper.
Workload	Estimated working hour: 10,5 hours/week.
Credit points	2-1 credits
Requirements	Animal Systematics (BIO 31101)
Learning goals/ competencies	<ol> <li>To be able to understand the roles of insects for human and environment.</li> <li>To be able to understand the correlation of entomology and other biological sciences.</li> <li>To be able to understand the relationships of Class Insecta to other classes in Phylum Arthropoda</li> <li>To be able to understand the general features, basis of classification, life cycle, distribution and habitat of insects.</li> </ol>



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	<ol> <li>To be able to understand the phylogeny of Class Insecta.</li> <li>To be able to understand the roles of insects: beneficial, destructive, and vectors.</li> <li>To have a basic ability of insects management.</li> <li>To have an ability of insects collection and its preservations.</li> <li>To be able to identify the insect's order, and several orders into family.</li> <li>To be able to perform independent or collaborative research.</li> <li>To be able to extent the knowledge to have more advance stage.</li> </ol>
Content	This course studies the general features of insects and its roles in the environment, the interconnection of entomology to other biological studies, the phylogeny of Phylum Arthropoda, general morphological characters of Class Insecta, Orders of Class Insecta, general features of Orders in Class Insecta, the use of insects determination key, beneficial insects; destructive insects, and management of insect population.
Study/exam achievements	<ol> <li>Theory         <ul> <li>Midterm: 40%</li> <li>Final examination: 40%</li> <li>Presentation, attendance and activity: 20%</li> </ul> </li> <li>Labortory Work         <ul> <li>Pretest: 10%</li> <li>Laboratory activity: 30%</li> <li>Laboratory report: 30%</li> <li>Final test: 30%</li> </ul> </li> </ol>
Forms of media	LCD, computer and white board
Literature	<ol> <li>Borror, D.J., D.M. Delong and Triplehorn. ?. An introduction to the study of insect 6<sup>th</sup> edition (terjemahan) Gama Uni. Press. Jogjakarta.</li> <li>Essing, E.O. 1958. College Entomology. The McMillan Company, New York. P. 36-37; 88-89</li> <li>Fox, R.M., J.W. Fox. 1963. introduction to comparative entomology. Reinhold Publ. Co. New York. pp 42-44; 86-89.</li> <li>Imms, A.D. 1960. A General text of entomology, Methuen &amp; Co. LTD. London. P 124-127.</li> <li>Matteson, R. 1944. Entomology for introductory courses. Conestack Publ. Inc. Ithaca, New York. p. 98-105.</li> <li>Romoser, W.S. &amp; Stoffolano J.G. Jr. 1998. The science of entomology 4<sup>th</sup>. McGraw-Hill. Boston.</li> <li>Ross, H.H. 1948. a text book of entomology. John Wiley &amp; Sons Inc. New York. pp. 10-25; 26-28</li> </ol>



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 Snodgrass, R.E. 1935. Principles of insect morphology. Mc. Graw-Hill Book Co. Inc. New York. p. 70-71.