



THE MODULE HANDBOOK

FACULTY OF BIOLOGY

Insect Ecology

Module code	BID 31203IUP
Module level	3 rd year of Undergraduate Program in Biology
Abbreviation, if applicable	-
Sub-heading, if applicable	-
Courses included in the module, if applicable	-
Semester/term	Odd
Module coordinator(s)	Dr. Siti Sumarmi
Lecture(s)	1. Dr. Siti Sumarmi 2. Drs. Hari Purwanto, M.P., Ph.D. 3. Sukirno, S.Si., M.Sc., Ph.D.
Language	English
Classification within the Curriculum	Elective course
Teaching format/ class hours per week during the semester	<p>This course is organised into 1 class and planned to have 13 to 14 teaching weeks and 2 – 3 weeks of examination.</p> <p>The course was scheduled every Wednesday 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 on insect ecology.</p>
Workload	Estimated working hour: 10,5 hours/week.
Credit points	2-1 credits
Requirements	Entomology (BID21201IUP)
Learning goals/ competencies	<ol style="list-style-type: none">1. To be able to understand the concepts of insects – environment interaction.2. To be able to understand the concepts of habitat, descriptive, biogenesis, ecological and analytical approaches of insect population.3. To have soft skill on the analysis of insect life table and the insect population growth.4. To have an ability to have both independent and collaborative small scale research on insect ecology.5. To be able to extend their knowledge to the next stage.



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Content	This course studies the important roles of insect ecology, the insect attributes, habitat and descriptive approaches in insect ecology, biogeographical approach in insect ecology, applied ecology and analytical approaches in insect ecology, insect – plant coevolution, life table and key factor, insect population growth, density dependent and density independent, environmental resistance and biotic potential, limiting factors, insect's reproductive strategy, intra – interspecific competition, population dynamic, the roles of natural enemies and pest management. The laboratory works include: insect rearing and life table, insects population monitoring on different habitat.
Study/exam achievements	<ol style="list-style-type: none">1. Theory<ol style="list-style-type: none">a. Midterm: 40%b. Final examination: 40%c. Presentation, attendance and activity: 20%2. Laboratory Work<ol style="list-style-type: none">a. Pretest: 10%b. Laboratory activity: 30%c. Laboratory report: 30%d. Final test: 30%
Forms of media	White board, computer, LCD
Literature	<ol style="list-style-type: none">1. Borror, D.J., D.M. DeLong and Triplehorn. 1992. An introduction to the study of insect. 6th edition (terjemahan) Gama Press. Yogyakarta .2. Price, P.W. 1997. Insect ecology. 3rd ed. John Wiley & Sons. New York.3. Price, P. W., R.F. Denno, M. D. Eubanks, D.L. Frinkle, and I. Kaplan. 2011. Insect ecology: Behavior, population and communities. Cambridge University Press. UK.4. Romoser, W.S. & Stoffolano J.G. Jr. 1998. The science of entomology. 4th Ed. McGraw-Hill. Boston.5. Ross, H.H. 1948. A text book of entomology. John Wiley & Sons Inc. New York.