



UNIVERSITAS NEGERI YOGYAKARTA

FACULTY OF MATHEMATICS AND SCIENCE

DEPARTMENT OF BIOLOGY EDUCATION

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Bachelor of Science in Biology

MODULE HANDBOOK

| | |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module name: | Biotropic |
| Module level, if applicable: | Undergraduate |
| Code: | BIO6231 |
| Sub-heading,if applicable: | - |
| Classes,if applicable: | - |
| Semester: | Even |
| Module coordinator: | Dr. Ir. Suhartini, MS |
| Lecturer(s): | Dr. Ir. Suhartini, MS. |
| Language: | Indonesian |
| Classification within the curriculum: | Elective Course |
| Teaching format / class hours per week during the semester: | 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual studyper week |
| Work load: | Total workload is 91 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks. |
| Credit points: | 2 SKS (3 ECTS) |
| Prerequisites course(s): | Ecology |
| Program Learning Outcomes: | <p>4. Comprehensively mastering Biology (core biology) to solve problems in the field of Biology (problem-solving) and to underlie the concepts of related sciences</p> <p>6. Being adaptive, creative, innovative in applying the concepts of Biology and other related fields</p> <p>9. Being able to work and create jobs/being an entrepreneur in the field of Biology</p> <p>11. Possessing scientific skills to support the ability to speak in local, national, and international forums</p> |
| Course Outcomes | <p>After taking this course, the students have ability to:</p> <p>CO1. Mastering the scope and basic concepts of tropical biology, boundaries and understanding of tropical forests</p> <p>CO2. - know the characteristics and characteristics of tropical forests, ecosystems and biotic communities of tropical forests, the structure and function of tropical forest ecosystems in terms of the flora, fauna and microbiota of tropical forests</p> <p>CO3. The dynamics of tropical forest ecosystems, the development and succession of tropical forest biotic communities</p> <p>CO4. Perform vegetation analysis, and classification of tropical</p> |

| | <p>forests</p> <p>CO5 Explain the diversity of tropical forest biota, rain forest biota, seasonal / coniferous forest biota, lowland forest biota, swamp, coast, highland / mountain biota</p> <p>CO6. Get to know tropical forests and their problems, utilization of tropical forests, HTI and forest cultivation</p> <p>CO7. Tropical forests and alien tribes, the use of tropical forests by tribes, the problem of shifting cultivation</p> <p>CO8. Explain exploitation of tropical forests, forestry communities and selective logging systems, forest exploitation using the TPI and TPTI methods, smallholder estates, industrial plantations</p> <p>CO9 .. Management of natural resources of tropical forests and preservation of tropical forest ecosystems as life support</p> <p>CO10. Responsible for planning, implementing and reporting tropical biology utilization activities in the form of scientific articles independently and in groups.</p> | | | | | | | | | | | | | | | |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------|-------------------|----------------------|--------|---|-------------|-------------------------------------------|-----------------------------------|------|-------|--|--|--|------|
| Content: | <p>This course discusses the scope and basic concepts of tropical biology, the structure and function of tropical forests in terms of the flora, fauna and microbiota of tropical forests, the characteristics and characteristics of tropical forests, the dynamics of tropical forest ecosystems, the interaction of flora, fauna and microbiota. Analysis of vegetation, classification and classification systems of tropical forests, problems of tropical forests and their use, exploitation in tropical forests, management and preservation of tropical forests as life support.</p> | | | | | | | | | | | | | | | |
| Study/exam achievements: | <p>The final mark will be weight as follow:</p> <table border="1"> <thead> <tr> <th>No</th> <th>CO</th> <th>Assessment Object</th> <th>Assessment Technique</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CO1 to CO10</td> <td>Observed attitudes, knowledge, and skills</td> <td>Survey, test, rubrics and manuals</td> <td>100%</td> </tr> <tr> <td colspan="4">Total</td> <td>100%</td> </tr> </tbody> </table> | No | CO | Assessment Object | Assessment Technique | Weight | 1 | CO1 to CO10 | Observed attitudes, knowledge, and skills | Survey, test, rubrics and manuals | 100% | Total | | | | 100% |
| No | CO | Assessment Object | Assessment Technique | Weight | | | | | | | | | | | | |
| 1 | CO1 to CO10 | Observed attitudes, knowledge, and skills | Survey, test, rubrics and manuals | 100% | | | | | | | | | | | | |
| Total | | | | 100% | | | | | | | | | | | | |
| Forms of media: | Real objects, model, multimedia | | | | | | | | | | | | | | | |
| Reference: | <p>A. Desmukh, I. 1992. Ekologi dan Biologi Tropika, Jakarta: Yayasan Obor Indonesia</p> <p>B. Qayim, I. 2005. Ekologi Hutan Tropis. Ed. Kedua. Jakarta: Universitas Terbuka</p> <p>C. Vickery, M.L.1984. Ecology of Tropical Plants. New York: John Wiley & Sons</p> | | | | | | | | | | | | | | | |

PLO and CO mapping

| | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 | PLO10 | PLO11 |
|-----|------|------|------|------|------|------|------|------|------|-------|-------|
| CO1 | | | | V | | | | | | | |
| CO2 | | | | V | | | | | | | |
| CO3 | | | | V | | | | | | | |
| CO4 | | | | V | | V | | | | | |
| CO5 | | | | V | | | | | | | |
| CO6 | | | | V | | V | | | v | | |
| CO7 | | | | V | | | | | | | |

