



UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND SCIENCE
DEPARTMENT OF BIOLOGY EDUCATION

Colombo 1 Street Yogyakarta 55281

Phone: (0274)565411 Ext. 217, (0274)565411(Administration Office),fax
(0274)548203

Website:fmipa.uny.ac.id, E-mail :humas_fmipa@uny.ac.id

Bachelor of Science in Biology

MODULE HANDBOOK

| | |
|---|---|
| Module name: | Economic Botany |
| Module level, if applicable: | Undergraduate |
| Code: | BIM6289 |
| Sub-heading,if applicable: | - |
| Classes,if applicable: | - |
| Semester: | Odd |
| 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): | Botany, Entrepreneurship |
| Perogram Learning Outcomes: | 4. Comprehensively mastering Biology (core biology) to solve problems in the field of Biology (problem-solving) and to underlie the concepts of related sciences 6. Being adaptive, creative, innovative in applying the concepts of Biology and other related fields 9. Being able to work and create jobs/being an entrepreneur in the field of Biology 11. Possessing scientific skills to support the ability to speak in local, national, and international forums |
| Course Outcomes | After taking this course, the students have ability to: CO 1. .Have sensitivity in finding, analyzing and solving botanical economic problems through the application of knowledge and technology by following the rules of the scientific method CO2. Mastering and applying the concept of plants that have economic value. CO3 Able to master the concept of using economically valuable plants including plants: food, vegetables & fruit, fiber, wood, tannins & dyes, rubber, oil, essential oils, fats, sugar, gum & resin, drugs, beverages, ornamental plants |

| | <p>CO4. Able to identify plants of economic value: food, vegetables & fruit, fiber, wood, tannins & dyes, rubber, oil, essential oils, fats, sugars, gums & resins, medicines, drinks, ornamental plants</p> <p>CO5.. Able to make processed products and cultivate plants of economic value</p> <p>CO6.. Responsible for planning, implementing and reporting economic botanical utilization activities in the form of scientific articles independently and in groups.</p> | | | | | | | | | | | | | | | |
|-------------------------|---|--|---|-------------------|----------------------|--------|---|------------|--|---|------|-------|--|--|--|------|
| Content: | Economic botany discusses plants with economic value, including plants: food, vegetables & fruit, fiber, wood, tannins & dyes, rubber, oil, essential oils, fats, sugar, gum & resins, drugs, drinks, ornamental plants; the use of each plant, product, method of processing products, processed products, and their cultivation. Able to identify plants of economic value. | | | | | | | | | | | | | | | |
| Study/examachievements: | <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 CO6</td> <td>Observed attitudes , knowledge, and skills</td> <td>Survey, test, rubrics and manuals</td> <td>100%</td> </tr> <tr> <td colspan="4" style="text-align: right;">Total</td> <td>100%</td> </tr> </tbody> </table> | No | CO | Assessment Object | Assessment Technique | Weight | 1 | CO1 to CO6 | Observed attitudes , knowledge, and skills | Survey, test, rubrics and manuals | 100% | Total | | | | 100% |
| No | CO | Assessment Object | Assessment Technique | Weight | | | | | | | | | | | | |
| 1 | CO1 to CO6 | Observed attitudes , knowledge, and skills | Survey, test, rubrics and manuals | 100% | | | | | | | | | | | | |
| Total | | | | 100% | | | | | | | | | | | | |
| Forms of media: | Real objects, model, multimedia | | | | | | | | | | | | | | | |
| Reference: | <p>A. Hans, C.C. 1973. House Plants & Indoor Gardening. Hongkong: Octopress Book Ltd.</p> <p>B. Hill, F.A. 1982. Economic Botany. New York-Toronto-London: McGraw Hill Book Company Inc.</p> <p>C. Pandey, B.P. 1980. Economic Botany. New Delhi: S. Chand & Company Ltd.</p> <p>D. Tyler, V.E., Brady, L.R. & Robbers, J.E. 1988. Pharmacognosi. Washington-Philadelphia: Lea and Febiger.</p> <p>E. Simpson, B.B. & Ogorzaly, M.C. 1986. Economic Botany Plants in Our World. New York: McGraw Hill Book Company Inc.</p> | | | | | | | | | | | | | | | |

PLO and CO mapping

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