

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: | Biometry | | | |
|-------------------------------|---|--|--|--|
| Module level, if applicable: | Undergraduate | | | |
| Code: | BI06227 | | | |
| Sub-heading, if applicable: | - | | | |
| Classes, if applicable: | - | | | |
| Semester: | Even | | | |
| Module coordinator: | Suhandoyo, MS. | | | |
| Lecturer(s): | Suhandoyo, MS., Yuni Wibowo, MPd., | | | |
| Language: | Bahasa Indonesia | | | |
| Classification within the | Compulsory Course | | | |
| curriculum: | | | | |
| Teaching format / class hours | 100 minutes lectures, 120 minutes structured activities, and 120 | | | |
| per week during the semester: | minutes individual studyper week | | | |
| | Total workload is 91 hours per semester which consists of 100 | | | |
| Work load: | minuteslectures, 120 minutes structured activities, and 120 | | | |
| | minutes individual study per weekfor 16 weeks. | | | |
| Credit points: | 2 SKS (3 ECTS) | | | |
| Prerequisites course(s): | Statistics | | | |
| 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. Boing adaptive, creative, innevative 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: | | | |
| | CO1. Applying descriptive analysis techniques to process biological | | | |

| | research data. CO2.Applying parametric and non parametric inferential statistical analysis techniques to process biological research data for the purpose of comparing two average values. CO3.Applying parametric and non parametric inferential statistical analysis techniques to process biological research data for the purpose of comparing k average values. CO4.Applying parametric and non parametric inferential statistical analysis techniques to process biological research data for the purpose of comparing k average values. CO4.Applying parametric and non parametric inferential statistical analysis techniques to process biological research data for the purpose of determining the pattern of relationships between dependent and the independent variables. | | | | | | |
|-------------------------|--|------------------|---|--|--------|--|--|
| Content: | This course contains the application of statistics to analyze biological research data which includes the application of data analysis using descriptive statistical analysis techniques, inferential statistical analysis parametric and nonparameric. | | | | | | |
| | The fi | inal mark will l | be weight as follow | /: | | | |
| Study/examachievements: | No | CO | Assessment Object | Assessment Technique | Weight | | |
| | 1 | CO1 to CO12 | Observed attitudes , knolwedge, and skills | Survey, test, rubrics and manuals | 100% | | |
| Forms of media: | Real objects, model, multimedia | | | | | | |
| Reference: | Real objects, model, multimedia Kirk, R.E. 1995. <i>Experimental design: Procedures for behavioral science</i>. Pasific Grove: Brooks/Colc l'ublishing Conrpanv Moh Nazir. (1988). <i>Metode penelitian</i>. Jakarta: Galia Indonesia Sudjana. (1982). <i>Disain dan analisis eksperimen</i>. Bandung: Tarsito. Vincent Gaspersz. (1991). <i>Teknik analisis dalam penelitian percobaan</i>. Jilid 1. Bandung: Tarsito Fisher, R.A. and Yates, F. (1974). <i>Statistical tabels for biological, agricultural, and medical research</i>. New York: Hafner. Gomez, K.A. and Gomez, A.A. (1984). <i>Statistical procedures for agricultural research</i>. 2-nd ed. New York: John Wiley & Sons. Nasution, A.H. dan Barizi. (1980) <i>Metode statistika untuk penarikan kesimpulan</i>. Ed keempat. Jakarta: Gramedia. Siegel, S. (1956). <i>Nonparameteric statistics for the beavioral sciences</i>. Tokyo: Mc-Graw-Hill Kogakusha, Ltd. Steel, R.G.D. and Torrie, J.H. (1980). <i>Principles and procedures of statistics: A biometrical approach</i>. 2-nd ed. New York: Mc-Graw-Hill Book Company. | | | | | | |

PLO and CO mapping

| | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 | PLO10 | PLO11 |
|-----|------|------|------|------|------|--------------|------|------|--------------|-------|-------|
| CO1 | | | | ✓ | | | | | | | |
| CO2 | | | | ✓ | | \checkmark | | | \checkmark | | ✓ |
| CO3 | | | | ✓ | | \checkmark | | | \checkmark | | ✓ |
| CO4 | | | | ✓ | | \checkmark | | | \checkmark | | ✓ |