**UNIVERSITAS NEGERI YOGYAKARTA**
**BIOLOGY EDUCATION**
1 Colombo 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 Education in Biology** | **MODULE HANDBOOK** |
|---|---|

| | |
|---|---|
| Module name: | Laboratory Work for Biometri |
| Module level, if applicable: | Undergraduate |
| Code: | BIO 6128 |
| Sub-heading, if applicable: | - |
| Classes, if applicable: | - |
| Semester: | 2th |
| Module coordinator: | Suhandoyo |
| Lecturer(s): | Suhandoyo |
| Language: | Indonesian |
| Classification within the curriculum: | Even |
| Teaching format / class hours per week during the semester: | 170 minutes activities per week. |
| Workload: | 170 minutes individual study per week for 16 weeks. |
| Credit points: | 1 sks |
| Prerequisites course(s): | - |
| Program Learning Outcome(s) | PLO 4. Mastering basic Biology and other relevant knowledge with mathematics and natural sciences<br>PLO 7. Being able to do independent laboratory work and fieldwork |
| Targeted learning outcomes: | CO.1. Perform the application of descriptive statistical analysis techniques to process biological research data.<br>CO.2. Perform the application of parametric and nonparametric inferential statistical analysis techniques to process biological research data for the purpose of comparing two mean values.<br>CO.3. Perform the application of parametric and non parametric inferential statistical analysis techniques to process biological research data for the purpose of comparing k average values.<br>CO.4. Perform the application of parametric and non parameteric inferential statistical analysis techniques to process biological research data for the purpose of determining the pattern of relationships between independent and dependent variables. |
| Content: | Implementing statistics to analyze biological research data includes the application of descriptive statistical analysis techniques, parametric and nonparametric inferential statistics. |
| Study / exam achievements: | Attitude assessment is carried out at each meeting by observation and/or self-assessment techniques using the assumption that basically every student has a good attitude. The student is marked very good or not good attitude if they show it significantly compared to other students in general. The result of attitude |

<table>
<tr><td></td><td>assessment is not taken into account in the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.<br><br>
<table>
<tr><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>CO1,<br>CO2,<br>CO3,<br>CO4.</td><td>Sub-competence test 1<br>Sub-competence test 2<br>Sub-competence test 3<br>Sub-competence test 4</td><td>Written test</td><td>20%<br>30%<br>30%<br>20%</td></tr>
<tr><td colspan="3">Total</td><td>100%</td></tr>
</table>
</td></tr>
<tr><td>Forms of media:</td><td>Board, LCD Projector, Laptop/Computer, SPSS program</td></tr>
<tr><td>References:</td><td>

1. Kirk, R.E. 1995. Experimental design: Procedures for behavioral science. Pasific Grove: Brooks/Colc l'ublishing Conrpanv
2. Moh Nazir. (1988). Metode penelitian. Jakarta: Galia Indonesia
3. Sudjana. (1982). Disain dan analisis eksperimen. Bandung: Tarsito.
4. Vincent Gaspersz. (1991). Teknik analisis dalam penelitian percobaan. Jilid 1. Bandung: Tarsito
5. Fisher, R.A. and Yates, F. (1974). Statistical tabels for biological, agricultural, and medical research. New York: Hafner.
6. Gomez, K.A. and Gomez, A.A. (1984). Statistical procedures for agricultural research. 2-nd ed. New York: John Wiley & Sons.
7. Nasution, A.H. dan Barizi. (1980) Metode statistika untuk penarikan kesimpulan. Ed keempat. Jakarta: Gramedia.
8. Siegel, S. (1956). Nonparameteric statistics for the beavioral sciences. Tokyo: Mc-Graw-Hill Kogakusha, Ltd.
9. Steel, R.G.D. and Torrie, J.H. (1980). Principles and procedures of statistics: A biometrical approach. 2-nd ed. New York: Mc-Graw-Hill Book Company.

</td></tr>
</table>

**PLO and CO mapping**

| | PLO 1 | PLO 2 | PLO 3 | PLO 4 | PLO 5 | PLO 6 | PLO 7 | PLO 8 | PLO 9 | PLO 10 | PLO 11 | PLO 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO 1 | | | | V | | V | | | | | | |
| CO 2 | | | | V | | V | | | | | | |
| CO 3 | | | | V | | V | | | | | | |
| CO 4 | | | | V | | V | | | | | | |