THE MODULE HANDBOOK
FACULTY OF BIOLOGY

English

Module code	BIO 30004
Module level	2nd 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. R.C. Hidayat Soesilohadi, M.S.
Lecture(s)	1. Dr. R.C. Hidayat Soesilohadi, M.S. 2. Dr. E. Suharyanto, M.Sc. 3. Drs. Sudjino, M.S.
Language	Indonesia
Classification within the Curriculum	Compulsory
Teaching format/class hours per week during the semester	This course is organised into 4 parallel classes and planned to have 14 teaching weeks and 2 weeks of examination.
Workload	Estimated working hour: 9 hours/week.
Credit points	3-0 credits
Requirements	Statistics (MMS 2401)
Learning goals/ competencies	**1. Knowledge and understanding** a. Process of scientific method. b. Biological and statistic concept for choosing experimental design and the analysis. **2. Ability/intellectual skill** Concluding output of the analysis to biology language by induction method. **3. Practical skill** Choosing and analyzing experimental design to answer the scientific question. **4. Managerial and transferable skill** Team work

	5. Attitude Critical thinking, creation and inovavation.
Content	This course will discuss: 1. Science and research method. 2. General pattern of the research. 3. Scientific question, hypothesis and experimental. 4. Experimental design: Principles of Experimental design. 5. The one-way Classification: Compeletely Random Design (CRD). 6. Analysis of variance for any number of group with equal reprication and unequal replication. 7. Mutiple comparisons. Multyway Classification: Randomized complete Block Design. Latin square Design. Factorial experiments, Split-plot design. Linear regression and correlation. 8. Mutiple and partial regression and correlation.Non linier regression. 9. Chi Square.
Study/ exam achievements	1. Midterm: 30 % 2. Final examination: 30 % 3. Assignment 10 % 4. Quiz: 10 % 5. Attendance: 10 %
Forms of media	White board, LCD, notebook
Literature	1. Gomez K.A. & A.A.Gomez. 2007. Prosedur statistik untuk penelitian pertanian. UI Press. 2. Hicks, C.R. 1982. Fundamental concepts in Design of experiments. 3th Edition. 3. CBS College Edition. New York. 4. Sudjana. 1982. Metoda Statistika. Penerbit Tarsito bandung. 5. Finney, D.J. 1971. Probit Analysis. 3th edition. The University Press. Cambridge. 6. Program SPSS versi 21.