Module Handbook

Module designation	Genetics (course code MPB 2111)
Semester(s) in which the module is taught	3
Person responsible for the module	*Siti Ifadatin, M.Si, Masnur Turnip, M.Sc*
Language	*Bahasa Indonesia*
Relation to curriculum	***Compulsory***
Teaching methods	*lecture and lab works*
Workload (incl. contact hours, self-study hours)	*(Estimated) Total workload: 170 minutes x 4 unit x 16 = 10,880 minutes (181 hours)* *Contact hours (please specify whether lecture, exercise, laboratory session, etc.):* *lecture: every Monday, 09:30 - 12:00 (class A)* *every Tuesday, 13:00 – 15:30 (class B)* *laboratory session: Saturday, 08:00 - 11:00* *Private study including examination preparation, specified in hours[1]: 180 minutes x 16 session = 2,880 minutes (48 hours)*
Credit points	*4 unit*
Required and recommended prerequisites for joining the module	*General Biology (course code MPB 1100)*

[1] When calculating contact time, each contact hour is counted as a full hour because the organisation of the schedule, moving from room to room, and individual questions to lecturers after the class, all mean that about 60 minutes should be counted.

Module objectives/intended learning outcomes	***General skills**: Mastering and being able to apply biological science and other scientific fields that support the development of biological science* ***First specific skill**: Able to work in teams and communicate actively orally and in writing in the field of biological sciences* ***Second specific skills**: Mastering biological instruments and methodologies and being able to apply them in the management of tropical wetland resources.*
Content	*Students will learn and understand genetics and organisms, Mendel's experiment, autosomal inheritance patterns, sex chromosomes, sex determination and sex chromosome linked inheritance, pedigree analysis, mitotic and meiotic cell division, gene interaction, chromosome linkage and mapping, changes in chromosome structure and number, cytoplasmic gene inheritance, genetic material, DNA structure, DNA replication, transcription, translation, and regulation of gene expression.*
Examination forms	*Written test*
Study and examination requirements	*Re-registration and 75% attendance.*
Reading list	1) *Griffith AJF, Wessler SR, Lewontin RC, Gelbart WM, Suzuki DT, Miller JH. 2005.An Introduction to Genetic Analysis Eighth Edition. WH Freeman & Co* 2) *Pierce BA. 2009. Genetics: A Conceptual Approach Third Edition. WH Freeman and Company*