

Module Handbook

Modul Name	Genetic Engineering
Modul Level	Bachelor
Abbreviation, if applicable:	BIT301
Sub---heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester	Odd (5 th Semester)
Module Coordinator	Dr. Y. Sri Wulan Manuhara, M.Si
Lectures	Dr. Sri Puji Astuti Wahyuningsih, M.Si
Language	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course / Elective Studies
Teaching format/ class hours per week during semester	300 minutes/ week
Workload per semester	100 min lecture + 100 min structural assignment + 100 min self-assignment x 13 weeks; total 3900 min = 65 hours 65/25 = 2.6 ECTS
Credit point	2
Requirements	Molecular Genetics
Learning goals/competencies	General Competence (Knowledge) Students have an ability to explain some methods in genetic engineering and analyzing a phenomenon which has relation with to the genetic engeneering
Content	Basic technique for DNA manipulation. DNA isolation, restriction and ligation. Plasmid as cloning vector. Genes cloning in host (<i>E. coli</i>). Genes transfer without host cells. Gene transfer in eukaryotes (animals and plants). Protein isolation technique. Recombinant selection using Southern, Northern, and Wester blot methods.
Soft skill Attribute	Discipline and presentation skill
Study/ exam achievements	Students are considered to be competent and pass if at least get 40% of maximum. Final score (NA) is calculated as follow: Paper project (20%), Quiz (10%), mid exam (30%), final exam (40%), Soft skill (10%) Final index is defined as follow: A : 75 - 100 AB : 70 - 74.99 B : 65 - 69.99 BC : 60 - 64.99 C : 55 - 59.99 D : 40 - 54.99 E : 0 - 39.99
Form of media	LCD
Learning Method	Lecturing, discussion, presentation of articles review
Literature	Old, R.W & S.B. Primrose, 1989. <i>Prinsip-prinsip Manipulasi Gen</i> ; Pengantar Rekayasa Genetika (terjemahan), Universitas Indonesia Press
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