UNIVERSITI TEKNOLOGI MARA

CBE561: GENETICS LAB

Course Name (English)	GENETICS LAB APPROVED
Course Code	CBE561
MQF Credit	1
Course Description	This course plans to illustrate principles that are presented in Genetics and Molecular Biology lecture and to provide an opportunity for the presentation of scientific results and theories. Experiments utilising restriction endonuclease to cleave DNA, isolation of genetic materials, bacteria transformation and to visualise and analyse a particular subset of macromolecules will be carried out.
Transferable Skills	Genetic laboratory skills
Teaching Methodologies	Lab Work
CLO	CLO1 Perform experiments that related to genetics and molecular biology. CLO2 Explain the basic principles of genetics and molecular biology from the experiments CLO3 Evaluate and present experimental results scientifically pertaining to molecular genetics theories
Pre-Requisite Courses	No course recommendations

Topics
1. Experiment 1: Genes in a bottle 1.1) n/a
2. Experiment 2: Bacterial Transformation 2.1) n/a
3. Experiment 3: Restriction endonuclease digestion and gel electrophores 3.1) n/a
4. Experiment 4: The isolation of genetic material by using PCR 4.1) n/a
5. Experiment 5: ELISA 5.1) n/a
6. Experiment 6: Blotting 6.1) n/a

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	Rubrics assessment	20%	CLO1 , CLO2 , CLO3
Test	n/a	20%	CLO1 , CLO2 , CLO3
Written Report	6 Lab reports	60%	CLO1 , CLO2 , CLO3

Reading List

Reference Book Resources

- **Mertens,T,.Hammaersmith,R.L. 1991, *Genetics:Laboratory Investigation,*, 9 Ed., McMillan Publishing Company,New York**

Article/Paper List: This Course does not have any article/paper resources

Other References: This Course does not have any other resources