



UNIVERSITI TEKNOLOGI MARA

BIO302: BASIC TECHNIQUES IN BIOLOGY

Course Name (English)	BASIC TECHNIQUES IN BIOLOGY APPROVED	
Course Code	BIO302	
MQF Credit	3	
Course Description	This course emphasizes laboratory techniques commonly applied in biological studies, including techniques in microbiology, histology, DNA technology, biochemical analysis, and field investigation. The course covers the underlying theory behind the application of these techniques and the associated technology and instruments.	
Transferable Skills	Knowledge & understanding, Practical skill, Digital skill	
Teaching Methodologies	Blended Learning, Lab Work, Discussion, Self-directed Learning, Journal/Article Critique, Interactive Lecture	
CLO	CLO1 Apply understanding of scientific principles related to basic techniques in biology. CLO2 Perform (plan, conduct and analyze) scientific investigations using different basic techniques in biology. CLO3 Select appropriate sources of information to address scientific issues related to basic techniques in biology.	
Pre-Requisite Courses	No course recommendations	
Reading List	Recommended Text	Wan Siti Atikah Wan Omar, Sarina Hashim, Nor Lailatul Wahidah Musa, and Low Kim Fatt 2019, <i>Laboratory Manual – Techniques & Skills in Biology</i> , JAPENA Universiti Teknologi MARA Cawangan Pahang Pahang [ISBN: 978983328904]
	Reference Book Resources	- Aakanchha J., Richa J., Sourabh J. 2020, <i>Basic Techniques in Biochemistry, Microbiology and Molecular Biology: Principles and Techniques</i>, (1st Edition) Ed., New York: Humana - Ibba, M. P. and Elasky, K. 2018, <i>Basic and Practical Microbiology Lab Manual</i>, (Revised 1st Edition) Ed., San Diego: Cognella, Incorporated - Hofmann, A., and Clokie, S. 2018, <i>Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology</i> (8th Edition) Ed., Cambridge: Cambridge University Press - Bogolyubov, A., Brody, M., Tatarinova, T. 2020, <i>Field Studies Techniques. Part 1. Geography and Landscape Sciences: Investigating Nature Together</i>, (1st Edition) Ed., Amazon Digital Services LLC - KDP Print US - Lisa, A. U., Michael L. C., Steven A. W., Peter V. M., Rebecca O. 2020, <i>Campbell Biology</i>, (12th Edition) Ed., USA: Person Benjamin
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	