



## SCHOOL OF INDUSTRIAL TECHNOLOGY

INSTRUCTIONAL PLAN (IP)

**Course:** IMG111/3 FOOD MICROBIOLOGY I  
**Semester:** SEMESTER II, ACADEMIC SESSION 2020/2021

**Note:** Due to the Movement Control Order (MCO) issued by the Malaysian Government, teaching and learning have been moved online, and the final examination ("Peperiksaan Akhir" or PA) has been replaced with coursework assessment.

<b>Lecture time</b>	Tuesday 10:00 AM – 12:00 PM
<b>Laboratory time</b>	Tuesday 2:00 PM – 6.00 PM
<b>Tutorial time</b>	-

No.	Lecturer	Email address	Teaching load
1	Dr. Effarizah Mohd Esah	effarizah@usm.my	1.5
2	Dr. Norlia Mahror	norlia.mahror@usm.my	1.5

No.	Course Learning Outcomes (CLO)	* PO	<sup>1</sup> LT	<sup>2</sup> SS	<sup>3</sup> Assessment Method
1	Mengenalpasti pelbagai jenis mikroorganisma, morfologi, struktur dan fungsi organel <i>Identify various types of microorganisms, morphology, structures and functions of organelles</i>	PO1	C1	-	Ujian (13) Peperiksaan (PA)
2	Menjelaskan mekanisme biokimia, fisiologi, metabolisma dan genetik mikroorganisma <i>Explains the mechanism of microbial biochemistry, physiology, metabolism and genetics</i>	PO1	C2	-	Ujian (13) Peperiksaan (PA)
3	Melaksanakan kaedah untuk pengkulturan, pengasingan, dan pengenalpastian mikroorganisma <i>Implement methods for cultivation, isolation and identification of microorganisms</i>	PO2	P2	-	Ujian praktikal (26)
4	Menghuraikan mekanisme pertumbuhan, pengawalan dan pencegahan mikroorganisma <i>Describe the mechanism of growth, control and prevention of microorganisms</i>	PO3	C2	CTPS1	Ujian (13) Peperiksaan (PA)
5	Menghuraikan secara lisan dan bertulis prinsip, teori, dan kaedah asas mikrobiologi makanan <i>Describe orally and in writing the basic principles, theories and methods of food microbiology</i>	PO4	A2	CS1	Tugasan (03) Pembentangan (53) Laporan makmal (11)

\* Programme Outcome

<sup>1</sup> Learning Taxonomy<sup>2</sup> Soft Skill

Week	Date	Lecturer	Topics	Delivery	Assessments	CLO
1	23.3.2021	Dr. Effarizah	Briefing & introduction	Online: Synchronous		
2	30.3.2021	Dr. Effarizah	History & Scope of Microbiology Prokaryotic cell structure & function	Online: Synchronous		CLO1
3	6.4.2021	Dr. Effarizah Dr. Norlia	Lab: Examining microbes & mold & yeast microbiology	F2F		CLO3
4	13.4.2021	Dr. Effarizah Dr. Norlia	Lab: Staining techniques	F2F		CLO3
5	20.4.2021	Dr. Effarizah Dr. Norlia	Lab: Media preparation, sample diluent & sterilization techniques	F2F		CLO3
6	27.4.2021	Dr. Effarizah Dr. Norlia	Lab: Aseptic techniques & culturing techniques	F2F		CLO3
7	4.5.2021	Dr. Effarizah Dr. Norlia	Lab: Serial dilution & plating techniques	F2F		CLO3 CLO5
8	10/5/2021 – 16/5/2021	<b>MID-SEMESTER BREAK</b>				
9	18.5.2021	Dr. Effarizah	Eukaryotic cell structure & function Microbial Nutrition Microbial Growth & Control	Online: Synchronous	Lab report (10% CW)	CLO4
10	25.5.2021	Dr. Effarizah Dr. Norlia	LAB TEST	F2F	Lab Test (10% CW)	CLO3
11	1.6.2021	Dr. Norlia	Microbial metabolism Energy conservation & release Microbial genetics	Online: Synchronous		CLO2
12	8.6.2021		PUBLIC HOLIDAY			
13	15.6.2021	Dr. Norlia	Introduction to mold & yeast Microbial evolution, taxonomy & diversity Viruses	Online: Synchronous		CLO1 CLO2
14	22.6.2021	Dr. Norlia Dr. Effarizah	TEST 1	Online: Synchronous Online: Asynchronous	Test 1 (20% CW)	CLO1 CLO2 CLO4
15	29.6.2021	Dr. Norlia Dr. Effarizah	Presentation	Online: Synchronous Online: Asynchronous	Presentation (10% CW) Assignment (10% CW)	CLO5
16	5/7/2021 – 11/7/2021	<b>REVISION WEEK</b>				
17	13.7.2021	<b>TEST 2 (30% EW)</b>				

18	20.7.2021	<b>TUGASAN 2 (10% EW)</b>
19	26/7/2021 – 1/8/2021	
20-29	2/8/2021 – 10/10/2021	<b>LONG VACATION</b>

40% EW component that has been converted to CW

**Final Examination (0%)**


Question No.	Topics	CLO	Lecturer
1	Not applicable		
2	Not applicable		
3	Not applicable		
4	Not applicable		
5	Not applicable		
6	Not applicable		

**Coursework Assessment (100%)**

Note: The final examination has been replaced by coursework assessment only

	Jenis	Kod	%
(i)	Ujian	13	50
(ii)	Tugasan	03	20
(iii)	Ujian praktikal	26	10

	Jenis	Kod	%
(iv)	Laporan makmal	11	10
(v)	Pembentangan	53	10

Prepared by:	Endorsed by:	Approved by:	Archived by:
Course Coordinator	Program Chairman	Dean	Asst. Registrar
			
Dr. Effarizah Mohd Esah	Prof Fazilah Ariffin	Prof Dr Norli Ismail	Pn Rasslene Rass Rasalingam
Date: 5/4/2021	Date: 5/4/2021	Date: 5/4/2021	Date: 5/4/2021