

SILLIMAN UNIVERSITY
INSTITUTE OF ENVIRONMENTAL AND MARINE SCIENCES
BACHELOR OF SCIENCE IN MARINE BIOLOGY
(2018 CURRICULUM)

FIRST YEAR

First Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
CHS 1 (2018)	Reading & Interpreting the Hebrew Scriptures	3	3	0	
GE 3 (2018)	The Contemporary World	3	3	0	
GE 5 (2018)	Purposive Communication	3	3	0	
GE 8 (2018)	Ethics	3	3	0	
MB 11 (2018)	Ecological Concepts	3	2	1	SHS ELS
MB 13 (2018)	Marine Invertebrates	4	2	2	SHS Bio2
PE 1 (2018)	Basic Physical Education I	2	2	0	
NSTP 1 (2018)	National Service Training Program	(3)	3	0	
PEP 1 (2018)	Personality Enhancement Program				
TOTAL		21(24)	21	3	
Contact hours/week		30	21	9	

Second Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
CHS 2 (2018)	Reading & Interpreting the Christian Scriptures	3	3	0	CHS 1
GE 1 (2018)	Understanding the Self	3	3	0	
GE 2 (2018)	Readings in Philippine History	3	3	0	
Math 18 (2018)	Calculus	4	4	0	SHS Math2
MB 12 (2018)	Marine Botany	4	2	2	SHS Bio2
MB 14 (2018)	General Physiology	3	2	1	SHS Bio2
PE 2 (2018)	Physical Education	2	2	0	PE 1
NSTP 2 (2018)	National Service Training Program	(3)	(3)	0	NSTP 1
PEP 2 (2018)	Personality Enhancement Program				PEP 1
TOTAL		22(25)	22	3	
Contact hours/week		31	22	9	

SECOND YEAR

First Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
GE 4 (2018)	Mathematics in the Modern World	3	3	0	
GE 6 (2018)	Art Appreciation	3	3	0	
MB 21A (2018)	Inorganic Analytical Chemistry	3	2	1	SHS Chem2
MB 23 (2018)	Scientific Writing	3	2	1	SHS Research
MB 25 (2018)	Marine Ecology	4	2	2	MB 11, 12, 13
MB 27 (2018)	Reproductive & Developmental Biology	3	2	1	MB 14
PE 3 (2018)	Physical Education	2	2	0	PE 2
TOTAL		21	16	5	
Contact hours/week		31	16	15	

Second Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
GE 7 (2019)	Science, Technology & Society	3	3	0	
GE 9 (2018)	The Life and Works of Jose Rizal	3	3	0	
MB 22 (2018)	Organic Chemistry	4	2	2	MB 21
MB 24 (2018)	Inferential Statistics & Biometry	3	2	1	SHS Stat
MB 26 (2018)	Chemical & Biological Oceanography	4	2	2	MB21 & MB25
MB 28 (2018)	Cell & Molecular Biology	4	3	1	MB 27
PE 4 (2018)	Physical Education	2	2	0	PE 3
TOTAL		23	17	6	
Contact hours/week		35	17	18	

THIRD YEAR

First Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
GE 10A (2018)	Whole Person Education	3	3	0	
MB 31A (2018)	Mechanics, Electromagnetism & Gravitational Theory	3	2	1	SHS Physics
MB 33A (2018)	Biochemistry	3	2	1	MB 22
MB 35A (2018)	Climate Change and Inter-connectivity	3	2	1	MB 25
MB 37A (2018)	Coral Reefs	3	2	1	MB 25
MB 39A (2018)	Introduction to Genetics	4	3	1	MB 27, MB 28
TOTAL		19	14	5	
Contact hours/week		29	14	15	

Second Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
GE 11A (2018)	Open Elective	3	3	0	
MB 32A (2018)	Waves, Optics & Thermodynamics	3	2	1	MB 31
MB 34A (2018)	Geological & Physical Oceanography	4	2	2	Math 18 & MB 31
MB 36A (2018)	Marine Microbiology & Fungi	4	2	2	MB 12
MB 38A (2018)	Elements of Research	3	3	0	MB 24
MB 40A1 (2018)	Undergraduate Thesis-1	2	2	0	MB 37
TOTAL		19	14	5	
Contact hours/week		29	14	15	

NOTE for Summer Term:

Subjects with "R" can be enrolled in any semester

Subjects with "S" are only offered in summer term (unless for special cases).

MB 43R*(Data Gathering and Analysis) are for students who passed MB 38 (2018) and are gathering data

Summer

Subj Code	Course Title	Units	Lec	Lab	PreReq
MB 41S (2018)	Practicum (162 hr)	3	0	3	MB 38
MB 42R (2018)	Water Safety	3	1	2	
MB 43RA (2018)	Undergraduate Thesis-2*	2	0	2	MB 38
TOTAL		6	1	5	
or		8	1	7	

FOURTH YEAR

First Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
MB 51 (2018)	Systematics, Biodiversity & Evolution	4	2	2	MB 12, MB 36
MB 53 (2018)	Marine Vertebrates	4	2	2	MB 27
MB 55 (2018)	Integrated Coastal/Marine Resource Management	4	2	2	MB 26, MB 34
MBElec1 (2018)	Marine Biology Elective-1	3	2	1	MB 26, MB 34
MB 43RA (2018)	Undergraduate Thesis-2**	2**	0	2	MB 38
**If not enrolled in previous summer term					
TOTAL		15/17**	8	9	
Contact hours/week		35	8	27	

Second Semester					
Subj Code	Course Title	Units	Lec	Lab	PreReq
CHS 3/GE 12 (2018)	Ethics of the Christian Faith	3	3	0	CHS 2
MBElec2 (2018)	Marine Biology Elective -2	3	2	1	MB 26, 34
MBElec3 (2018)	Marine Biology Elective -3	3	2	1	MB 26, 34
MBElec4 (2018)	Marine Biology Elective -4	3	2	1	MB 26, 34
MBElec5 (2018)	Marine Biology Elective -5	3	2	1	MB 26, 34
MB 99A (2018)	Undergraduate Thesis-3	2	2	0	MB 43R
TOTAL		17	13	4	
Contact hours/week		25	13	12	

1 **Lecture unit** = 1 contact hour; 1 **Laboratory unit** = 3 contact hours

MARINE BIOLOGY ELECTIVES

MB 60 (2018). Ichthyology

MB 61 (2018). Fishery Management

MB 62 (2018). Mariculture/Silviculture

MB 63 (2018). Marine Pollution

MB 64 (2018). Pathology of Marine Organisms

MB 65 (2018). Marine Birds

MB 66 (2018). Marine Mammals

MB 67 (2018). Sediment Ecology

MB 68 (2018). Marine Plankton

MB 69 (2018). Phycology

MB 70 (2018). Marine Protected Areas

MB 71 (2018). Scientific Diving

MB 72 (2018). Remote Sensing and GIS

MB 73 (2018). Marine Reptiles

MB 74 (2018). Marine Natural Products

MB 75 (2018). Marine Biogeography and Mapping

MB 76 (2018). Ecosystem Remediation and Restoration

MB 77 (2018). Insects & the Marine Ecosystem

MB 78 (2018). Mangrove Forests

MB 79 (2018). Special Topics in Marine Biology