

PROGRAM CURRICULUM

Program : Bachelor of Science in Biology (BSBio)
 Department : Department of Biology
 Date of Revision : Rev. 1, 01-04-2019
 College : College of Arts and Sciences
 Effectivity : 2nd Semester, AY 2018-2019
 Basis : CMO 49 Series 2017

FIRST YEAR

Grade	FIRST SEMESTER		Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
	COURSE	DESCRIPTIVE TITLE	Total	Lec.	Lab.	Total	Lec.	Lab.		
	MMW	Mathematics in the Modern World (with Lab)	3	3	0	3	3	0	None	None
	UTS	Understanding the Self	3	3	0	3	3	0	None	None
	BIOL 101	General Botany	5	3	2	9	3	6	None	None
	BIOL 102	General Zoology	5	3	2	9	3	6	None	None
	Chem A	General Chemistry Enhancement Program	{5}	{3}	{2}	{9}	{3}	{6}	None	None
	PE 1	Physical Fitness	2	2	0	2	2	0	None	None
	NSTP 1	CWTS/LTS/ROTC 1	3	3	0	3	3	0	None	None
	SE 101	Orientation to University Life	0			1.5			None	None
			21	17	4	29	17	12		

* Will be taken by Non-STEM track and the units in parenthesis are not included in the total number of units.

FIRST YEAR

Grade	SECOND SEMESTER		Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
	COURSE	DESCRIPTIVE TITLE	Total	Lec.	Lab.	Total	Lec.	Lab.		
	STS	Science Technology and Society	3	3	0	3	3	0	None	None
	PC	Purposive Communication I	3	3	0	3	3	0	None	None
	BIOL 103	General Ecology	5	3	2	9	3	6	BIOL 101, BIOL 102	None
	Chem 36	Fundamentals of Organic Chemistry	5	3	2	9	3	6	Chem A/ STEM	None
	STAT 10	Statistics for Life Sciences	3	2	1	5	2	3	MMW	None
	PE 2	Rhythmic Activities	2	2	0	2	2	0	PE 1	None
	NSTP 2	CWTS/LTS/ROTC 2	3	3	0	3	3	0	NSTP 1	None
	EEP 1	English Enhancement Program 1	2	2	0	2	2	0	None	None
	SE 102	The Elements of Success	0			1.5			None	None
			26	21	5	37.5	21	15		

FIRST YEAR

Grade	MIDYEAR SEMESTER		Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
	COURSE	DESCRIPTIVE TITLE	Total	Lec.	Lab.	Total	Lec.	Lab.		
	Phys A	Physics Enhancement Program for Sciences	{4}	{3}	{1}	{6}	{3}	{3}	None	none
			0	0	0	0	0	0		

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SECOND YEAR

Grade	FIRST SEMESTER		Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
	COURSE	DESCRIPTIVE TITLE	Total	Lec.	Lab.	Total	Lec.	Lab.		
	CW	The Contemporary World	3	3	0	3	3	0	None	None
	Eth	Ethics	3	3	0	3	3	0	None	None
	EEP 2	English Enhancement Program 2	2	2	0	2	2	0	EEP 1	None
	BIOL 104	Systematics	5	3	2	9	3	6	BIOL 101, BIOL 102	None
	BIOL 105	Genetics	5	3	2	9	3	6	None	None
	Chem 46	Fundamentals of Biochemistry	5	3	2	9	3	6	Chem 36	None
	PE 3	Individual and Dual Sports	2	2	0	2	2	0	None	None
	SE 103	Intrapersonal and Interpersonal Skills	0			1.5			None	None
			25	19	6	38.5	19	18		

SECOND YEAR

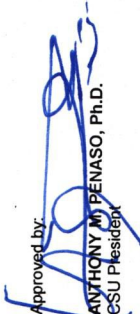
Grade	SECOND SEMESTER		Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
	COURSE	DESCRIPTIVE TITLE	Total	Lec.	Lab.	Total	Lec.	Lab.		
	RPH	Readings in the Philippine History	3	3	0	3	3	0	None	None
	EEP 3	English enhancement Program 3	2	2	0	2	2	0	EEP 2	None
	Chem 26	Fundamentals of Analytical Chemistry	5	3	2	9	3	6	Chem A/STEM	None
		Free Elective 1	3	3	0	3	3	0	None	None
	BIOL 106	Microbiology	5	3	2	9	3	6	BIOL 101, BIOL 102	Chem 36
	PE 4	Major Sports /Team Sports	2	2	0	2	2	0	None	None
	SE 104	Social Responsibility and Accountability	0			1.5			none	None
			20	16	4	29.5	16	12		

THIRD YEAR

Grade	FIRST SEMESTER		Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
	COURSE	DESCRIPTIVE TITLE	Total	Lec.	Lab.	Total	Lec.	Lab.		
	LWR	Life and Works of Rizal	3	3	0	3	3	0	None	None
	TEM	The Entrepreneurial Mind	3	3	0	3	3	0	None	None
	BIOL 107	Cell and Molecular Biology	5	3	2	9	3	6	BIOL 105	Chem 46
	BIOL 108	General Physiology	5	3	2	9	3	6	BIOL 101, BIOL 102	Chem 46
	BIOL 109	Evolutionary Biology	5	3	2	9	3	6	BIOL 104	None
	SE 105	Career Readiness 1	0			1.5			None	None
			21	15	6	34.5	15	18		

THIRD YEAR

Grade	SECOND SEMESTER		Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
	COURSE	DESCRIPTIVE TITLE	Total	Lec.	Lab.	Total	Lec.	Lab.		
	Art App	Art Appreciation	3	3	0	3	3	0	None	None
	Phys 56	Introduction to Biophysics	4	2	2	8	2	6	Phys A/STEM	None
	BIOL 110	Developmental Biology (Plants and Animals)	5	3	2	9	3	6	BIOL 107, BIOL 108	None
	BIOL	Specialized Course 1	5	3	2	9	3	6	As Required	None

Approved by:

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 CSU President

Noted:


 ROLANDO N. PALUGA, Ph.D.
 VPAA

Verified by:


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 Dean

Prepared by:

 LEILA A. OMBAT, PhD
 Department Chairperson

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BIOL	197	Undergraduate Thesis I: Research Methods	2	2	0	2	2	0	As Required**	None
SE	106	Career Readiness 2	0			1.5			SE 105	None
			19	13	6	32.5	13	18		

THIRD YEAR

SUMMER SEMESTER		DESCRIPTIVE TITLE	Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
COURSE			Total	Lec.	Lab.	Total	Lec.	Lab.		
BIOL	196	Practicum	3	0	0	150	0	0	As Required**	None
			3	0	0	150	0	0		

FOURTH YEAR

FIRST SEMESTER		DESCRIPTIVE TITLE	Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
COURSE			Total	Lec.	Lab.	Total	Lec.	Lab.		
BIOL		Specialization Course II	5	3	2	9	3	6	As Required	None
BIOL		Specialization Course III	5	3	2	9	3	6	As Required	None
BIOL	198	Undergraduate Thesis II : Data Gathering and Analysis	2	0	2	2	0	2	BIOL 197	None
		Free Elective II	3	3	0	3	3	0	None	None
SE	107	Pre-Employment Seminar 1	0			1.5			None	None
			15	9	6	24.5	9	14		

FOURTH YEAR

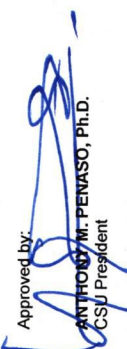
SECOND SEMESTER		DESCRIPTIVE TITLE	Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
Grade	COURSE		Total	Lec.	Lab.	Total	Lec.	Lab.		
	BIOL	Specialization Course IV	5	3	2	9	3	6	As Required	None
	BIOL	Specialization Course V	5	3	2	9	3	6	As Required	None
	BIOL	199 Undergraduate Thesis III : Final Manuscript Writing and Seminar	2	0	2	2	0	2	BIOL 198	None
	SE	108 Pre-Employment Seminar 2	0			1.5			SE 107	None
			12	6	6	21.5	6	14		
OVER-ALL TOTAL			162	116	43	397.5	116	121		

**Pre-requisites for BIOL 196-Practicum and BIOL 197-Undergrad Thesis I: Chem 46, STAT 10, Phys 56, BIOL104, BIOL 105, BIOL, 106, BIOL 107, BIOL 108, BIOL 109 and all GEC courses.

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LIST OF ELECTIVES / SPECIALIZATION COURSES

Grade	COURSE	DESCRIPTIVE TITLE	Units			Contact Hrs.			Pre-requisite (s)	Co-requisite
			Total	Lec.	Lab.	Total	Lec.	Lab.		
A. ECOLOGY										
	BIOL	111 Population Ecology	5	3	2	9	3	6	BIOL 103	None
	BIOL	112 Behavioral Ecology	5	3	2	9	3	6	BIOL 103	None
	BIOL	113 Community Ecology	5	3	2	9	3	6	BIOL 103	None
	BIOL	114 Freshwater Ecology	5	3	2	9	3	6	BIOL 103	None
	BIOL	115 Marine Ecology	5	3	2	9	3	6	BIOL 103	None
	BIOL	116 Terrestrial Ecology	5	3	2	9	3	6	BIOL 103	None
	BIOL	117 Biological Resource Management	5	3	2	9	3	6	BIOL 103	None
	BIOL	118 Microbial Ecology	5	3	2	9	3	6	BIOL 103, BIOL 106	None
	BIOL	119 Wildlife Studies	5	3	2	9	3	6	BIOL 103	None
	BIOL	120 Cave Ecology	5	3	2	9	3	6	BIOL 104	None
B. ANIMAL BIOLOGY										
	BIOL	121 Comparative Vertebrate Anatomy and Phylogeny	5	3	2	9	3	6	BIOL 102	None
	BIOL	122 Invertebrate Zoology	5	3	2	9	3	6	BIOL 102	None
	BIOL	123 Developmental Zoology	5	3	2	9	3	6	BIOL 102	None
	BIOL	124 Animal Physiology	5	3	2	9	3	6	BIOL 102	None
	BIOL	125 Entomology	5	3	2	9	3	6	BIOL 102	None
	BIOL	126 Parasitology	5	3	2	9	3	6	BIOL 102	None
	BIOL	127 Nematology	5	3	2	9	3	6	BIOL 102	None
	BIOL	128 Herpetology	5	3	2	9	3	6	BIOL 102	None
	BIOL	129 Histology	5	3	2	9	3	6	BIOL 102	None
	BIOL	130 Ichthyology	5	3	2	9	3	6	BIOL 102	None
C. PLANT BIOLOGY										
	BIOL	131 Taxonomy of Non-Vascular Plants	5	3	2	9	3	6	BIOL 104	None
	BIOL	132 Taxonomy of Higher Vascular Plants	5	3	2	9	3	6	BIOL 104	None
	BIOL	133 Ethnobotany	5	3	2	9	3	6	BIOL 101	None
	BIOL	134 Economic Botany	5	3	2	9	3	6	BIOL 101	None
	BIOL	135 Plant Physiology	5	3	2	9	3	6	BIOL 108	None
	BIOL	136 Plant Morphoanatomy	5	3	2	9	3	6	BIOL 101	None
	BIOL	137 Plant Growth and Development	5	3	2	9	3	6	BIOL 110	None

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BIOL	141	Virology	5	3	2	9	3	6	BIOL 106	None
BIOL	142	Microbial Taxonomy	5	3	2	9	3	6	BIOL 106	None
BIOL	143	Microbial Physiology	5	3	2	9	3	6	BIOL 106, BIOL 108	None
BIOL	118	Microbial Ecology	5	3	2	9	3	6	BIOL 103, BIOL 106	None
BIOL	144	Microbial Genetics	5	3	2	9	3	6	BIOL 106, BIOL 105	None
BIOL	145	Industrial Microbiology	5	3	2	9	3	6	BIOL 106	None
BIOL	146	Food Microbiology	5	3	2	9	3	6	BIOL 106	None
BIOL	147	Medical Microbiology*	5	3	2	9	3	6	BIOL 106	None
BIOL	148	Pathology	5	3	2	9	3	6	BIOL 106	None
BIOL	149	Epidemiology	5	3	2	9	3	6	BIOL 106, BIOL 108	None

E. GENETICS

BIOL	144	Microbial Genetics	5	3	2	9	3	6	BIOL 105, BIOL 106	None
BIOL	151	Cytogenetics	5	3	2	9	3	6	BIOL 105	None
BIOL	152	Molecular Genetics	5	3	2	9	3	6	BIOL 105	None
BIOL	153	Human Genetics	5	3	2	9	3	6	BIOL 105	None
BIOL	154	Population and Quantitative Genetics	5	3	2	9	3	6	BIOL 105	None
BIOL	155	Developmental Genetics	5	3	2	9	3	6	BIOL 105	None
BIOL	156	BioSocial Genetics	5	3	2	9	3	6	BIOL 105	None

F. MEDICAL BIOLOGY

BIOL	161	Medical Entomology	5	3	2	9	3	6	BIOL 102	None
BIOL	162	Medical Parasitology	5	3	2	9	3	6	BIOL 102	None
BIOL	163	Human Anatomy and Physiology	5	3	2	9	3	6	BIOL 108	None
BIOL	148	Epidemiology	5	3	2	9	3	6	BIOL 108	None
BIOL	164	Immunology	5	3	2	9	3	6	BIOL 108	None
BIOL	165	Medical Histology	5	3	2	9	3	6	BIOL 102	None
BIOL	166	Radiation Biology	5	3	2	9	3	6	BIOL 105	None
BIOL	167	Endocrinology	5	3	2	9	3	6	BIOL 107	None
BIOL	126	Parasitology	5	3	2	9	3	6	BIOL 102	None
BIOL	147	Medical Microbiology	5	3	2	9	3	6	BIOL 106	None
BIOL	153	Human Genetics	5	3	2	9	3	6	BIOL 105	None
BIOL	156	BioSocial Genetics	5	3	2	9	3	6	BIOL 105	None

G. CELLULAR AND MOLECULAR BIOLOGY

BIOL	164	Immunology	5	3	2	9	3	6	BIOL 108	None
BIOL	171	Recombinant DNA Techniques	5	3	2	9	3	6	BIOL 107	None
BIOL	167	Radiation Biology	5	3	2	9	3	6	BIOL 105	None
BIOL	172	Molecular Genetics	5	3	2	9	3	6	BIOL 105	None
BIOL	173	Molecular Systematics	5	3	2	9	3	6	BIOL 105	None
BIOL	174	Bioinformatics	5	3	2	9	3	6	BIOL 106, BIOL 107	None
BIOL	175	Genomics and Proteomics	5	3	2	9	3	6	BIOL 106, BIOL 107	CHEM 46
BIOL	176	Cellular Physiology	5	3	2	9	3	6		

I. BIODIVERSITY CONSERVATION

BIOL	181	Introduction to Phillipine WildLife	5	3	2	9	3	6	BIOL 103	None
BIOL	182	Conservation Biology in the Tropics	5	3	2	9	3	6	BIOL 103	None
BIOL	183	Principles of Wildlife Conservation	5	3	2	9	3	6	BIOL 103	None
BIOL	184	Host-Parasite Interaction: Implication for Conservation	5	3	2	9	3	6	BIOL 103	None
BIOL	185	Freshwater Conservation and Management	5	3	2	9	3	6	BIOL 103	None
BIOL	186	Coastal and Marine Resource Management	5	3	2	9	3	6	BIOL 103	None
BIOL	187	Biogeography	5	3	2	9	3	6	BIOL 103	None
BIOL	188	Techniques of Wildlife Management	5	3	2	9	3	6	BIOL 103	None
BIOL	189	Mangrove Conservation and Restoration	5	3	2	9	3	6	BIOL 104	None
BIOL	116	Terrestrial Ecology	5	3	2	9	3	6	BIOL 103	None
BIOL	120	Cave Ecology	5	3	2	9	3	6	BIOL 103	None
BIOL	125	Entomology	5	3	2	9	3	6	BIOL 102	None
BIOL	127	Nematology	5	3	2	9	3	6	BIOL 102	None
BIOL	128	Herpetology	5	3	2	9	3	6	BIOL 102	None
BIOL	130	Ichthyology	5	3	2	9	3	6	BIOL 102	None

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