



Republic of the Philippines
Office of the President
COMMISSION ON HIGHER EDUCATION
REGIONAL OFFICE XI
Loyola St., Obrero, Davao City



Tel. Nos.: +63 (82) 295-3418 • 295-7696 • 282-4448 • 321-7418 Email: chedro11@ched.gov.ph

1ST INDORSEMENT
May 21, 2019

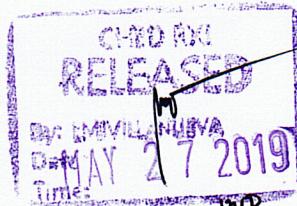
Respectfully forwarded to **DR. JOY M. SORROSA** President for Davao del Norte State College (DNSC), New Visayas, Panabo City, Davao del Norte, the attached revised curriculum for the Bachelor of Science in Marine Biology in compliance with CMO 46, S. of 2017, effective School Year 2018-2019, **contents noted**.

Please be informed that the revised curriculum shall be applicable only to entering freshmen and new students of the intended academic year.

MARICAR R. CASQUEJO, Ph.D., CESO III
Director IV

Encl: As stated

Cc: Record/File/ldc



Loyola St. Obrero, Davao City, Philippines
Telephone Number: (082) 295-3418 / E-mail Address: chedro11@ched.gov.ph



Republic of the Philippines

DAVAO DEL NORTE STATE COLLEGE

New Visayas, Panabo City, Davao del Norte, Philippines 8105

Website: www.dnsc.edu.ph; Telephone #: 63 84 6284301; 6288203

Email Address: president@dnsc.edu.ph; jab@dnsc.edu.ph

A. BACKGROUND/RATIONALE OF THE REVISION

The Guidelines for the implementation of CMO No. 46, series of 2012, this PSG implements the “shift to learning competency-based standards/ outcomes-based education.” It specifies the ‘core competencies’ expected of BS Marine Biology graduates “regardless of the type of HEI they graduate from.” However, in “recognition of the spirit of outcomes-based education and … of the typology of HEIs,” this PSF also provides “ample space for HEIs to innovate in the curriculum in line with the assessment of how best to achieve learning outcomes in their particular contexts and their respective missions”. With the impending integration of the ASEAN economies and implementation of the K to 12 Program, it is also important to make the BS in Marine Biology curriculum compliant with the regional standards so the graduates may be able to practice their profession throughout the ASEAN Region and vice-versa with the ultimate goal of providing globally competitive graduates who demonstrate knowledge and skills on how to sustainably manage resources and apply such knowledge and skills in response to national issues and global concerns.

The Philippines need to develop manpower to help manage, sustain and enhance marine resources. The global trend of Marine Biology is to highlight the function of biodiversity, as a resource and a strategy to global change. This is reflected in the revised curriculum program.

The last revision in the BSMB Program was on 2007, after 11 years there is a need to revise the BSMB curriculum considering the current needs as mentioned above and the subsequent CHED Memo orders issued. Section 13 of RA No. 7722, the Higher education institution shall exercise academic freedom in its curricular offerings but must comply with the minimum requirements for specific academic programs, general education distribution requirements and the specific professional courses. Hence, this revision is consistent with the CHED CMO 46 series of 2017 which provides the policies, standards and guidelines for the revision of the curriculum.

B. PROGRAM DESCRIPTION

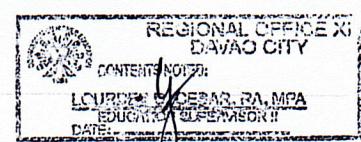
▪ Degree Name

The degree program shall be called Bachelor of Science in Marine Biology (BS Marine Biology).

▪ Nature of Field of Study

Marine Science by definition is the branch of knowledge which deals with the science of the sea and all the life and the processes and interactions in it. Marine Biology as a discipline in higher education, finds its role in the creation of human resource that will steward the vast marine resources of the Philippines. Considering that the Philippines has the 5th longest coastline in the world (36,289 kilometers) and the strategic location of the Philippines in the heart of the Coral Triangle. More importantly, the Philippines has been identified globally as the Center of the Marine Shore Fish Biodiversity. The major importance of marine resources in food, medicine, tourism, materials, energy, climate, security and pharmaceuticals should be acknowledged.

Therefore, Marine Science and Marine Biology are fields that need to be given attention and priority by the Philippine government. Being an archipelagic country, the Philippines needs to develop manpower to help manage. Sustain and enhance marine resources.





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The global trend of Marine Biology is to highlight the function of biodiversity not only as a resource but as a strategy for resilience to global change. This is reflected in the recommended curriculum of the Program.

- **Specific Professions /Careers/Occupation for Graduates**

BS Marine Biology graduates can take career paths in coastal and marine related professions including marine resource management. Specific areas can be in fisheries, oceanography, conservation and biodiversity, environmental biology, research, pollution and siltation control and management, hazard mitigation, coastal land use, tourism, marine archaeology, science communication and education.

- **Allied programs**

Marine Biology is allied to biology, chemistry, pharmacy, fisheries, physics, oceanography, marine science, biotechnology, forestry, environmental science, natural resource management.

Specialist from these fields can teach the majors and elective courses in the program.

C. PROGRAM OBJECTIVES

The program aims to develop graduates that will have clear recognitions and understanding of the dynamics of the marine life and its ecosystem through actual field/hands-on experience which will provide the foundations for future careers in marine biology, conservation, oceanography, biomedicine, molecular biology, university teaching, fisheries, etc.

Graduates of the BS Marine Biology program should be able to:

- a. Apply the scientific process in general problem solving
- b. Have skills that can contribute to the management of tropical marine resources
- c. Pursue further careers in related fields (e.g. research, teaching, resource management, etc.)
- d. Have knowledge to promote sustainable utilization of marine resources.

D. PROGRAM OUTCOMES

The standards for the BS Marine Biology program are expressed in the following minimum set of learning outcomes:

- **Common to all baccalaureate programs in all types of institutions**

- a. articulate the latest developments in their specific field of practice. (PQF level 6 descriptor)
- b. effectively communicate orally and in writing using both English and Filipino languages.
- c. work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)
- d. demonstrate professional, social, and ethical responsibility, especially in practicing intellectual property rights and sustainable development.
- e. preserve and promote "*Filipino historical and cultural heritage*". (based on RA 7722)



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▪ Common to the Science and Mathematics Disciplines

- f. demonstrate broad and coherent knowledge and understanding in the core areas of physical and natural science
- g. apply critical and problem solving skills using the scientific method.
- h. interpret relevant scientific data and make judgments that include reflection on relevant scientific and ethical issues
- i. carry out basic mathematical and statistical computations and use appropriate technologies in (a) the analysis of data; and (b) in pattern recognition, generalization, abstraction, critical analysis and problem solving
- j. communicate information, ideas problems and solutions, both, orally and in writing, to other scientists, decision makers and the public
- k. relate science and mathematics to the other disciplines
- l. design and perform safe and responsible techniques and procedures in laboratory or field practices
- m. critically evaluate input from others
- n. appreciate the limitations and implications of science in everyday life
- o. commit to the integrity of data

CURRICULUM OVERVIEW

I. General Education (GE) Courses

Core General Education Courses	24 units
Understanding the Self /Pag-unawa sa Sarili	3 units
Readings in Philippine History	3 units
Mathematics in the Modern World (application of Mathematics in daily life)	3 units
Purposive Communication (Writing, speaking and presenting to different audiences)	3 units
Art Appreciation	3 units
Science, Technology and Society	3 units
Ethics	3 units
The Contemporary World (Globalization and its impact on individuals, communities and nations)	3 units

Elective courses	9 units
Mathematics, Science and Technology (e.g. Information Technology)	3 units
Arts and Humanities (e.g. Entrepreneurship)	3 units
Social Sciences and Philosophy (e.g. Economics, Development and Population)	3 units

Rizal Course	3 units

II. Foundation Courses

AREA	COURSES	UNITS
Mathematics	Calculus (Integrative) (4) Inferential Statistics and Biometry (3)	7
Chemistry	Inorganic Chemistry (3) Organic Chemistry (4) Biochemistry (3)	10
Physics	Mechanics, Electromagnetism and Gravitational Theory (3)	6



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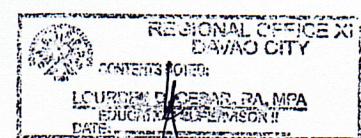
	Waves, Optics and Thermodynamics (3)	
Biology	Cell and Molecular Biology (4) General Physiology (3) Development and Reproductive Biology (3) Ecology (3) Genetics (4) <i>*All Bio Courses should include laboratory Component</i>	17
Earth Science	To include climate change and inter-connectivity, spatial planning (in the context of the Marine Environment), Geology, tele-connections, monsoon, El Niño-Southern Oscillations, Pacific Decadal Oscillation, cyclo (with lab)	3
		TOTAL 43

III. Core Courses**42 units**

Coral Reefs	3 units
Elements of Research (to include field sampling design)	3 units
Integrated Coastal/Marine Resource Management	4 units
Oceanography I	4 units
Oceanography II	4 units
Marine Zoology I (Invertebrate)	4 units
Marine Zoology II (Vertebrate)	4 units
Marine Botany (Plants-Mangrove, Sea grass, Algae)	4 units
Marine Microbiology and Fungi	4 units
Marine Ecology	4 units
Systematics, Biodiversity and Evolution	4 units

IV. Electives**9 units**

Electives
<ul style="list-style-type: none"> • Ichthyology • Fishery Management • Mariculture/Silviculture • Marine Chemistry • Marine Biochemistry • Marine Natural Products • Marine Pollution • Marine Birds • Marine Mammals • Marine Plankton • Marine Reptiles • Meiofauna • Phycology • Marine Protected Areas • Remote Sensing and Geographic Information System • Scientific Diving • Marine Biotechnology

V. Thesis**6 units****VI. Practicum****3 units****VII. National Service Training Program****6 units****VIII. Physical Education****8 units**



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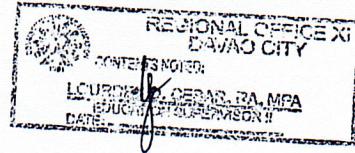
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BACHELOR OF SCIENCE IN MARINE BIOLOGY
2018 Revised Curriculum

FIRST YEAR / First Semester						
Course No.	Course Title	Total Units	Units Lec	Units Lab	Prerequisite	Description
Physics 111	Mechanics, Electromagnetism, and Gravitational Theory	3	2	1	NONE	The physics of the universe appears to be dominated by the effects of fundamental forces; gravity, electromagnetism, weak nuclear forces, and strong nuclear forces. These forces control how matter, energy, space and time interact to produce our physical world. All other forces, such as the force you exert in standing up, are ultimately derived from these fundamental forces.
Math 111	Mathematics in the Modern World	3	3	0	NONE	Nature of Mathematics, appreciation of its practical, intellectual, and aesthetic dimensions, and application of mathematical tools in daily life.
Chem 111	Inorganic Analytical Chemistry	5	3	2	NONE	The course deals with the fundamental concepts of chemical kinetics, chemical equilibrium, thermodynamics, and electrochemistry. It also deals with the properties and reactions of elements and compounds as an introduction to qualitative analyses and stoichiometry. It also deals with the principles and theories important to the practice of analytical chemistry which includes general introduction to common analytical operations and measurements. Discussion of the techniques, methods and instrumentation involved in determining the amount of constituents in samples will be given particular attention.
Bio 102	Cell and Molecular Biology	4	3	1	NONE	Lecture – This course deals with the study of the structure and function of cellular organelles and inclusions including the relationship between cell and structure and biochemical





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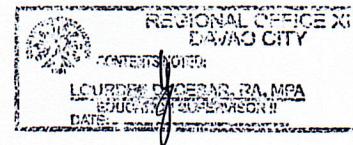
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FIRST YEAR / Second Semester						
Course No.	Course Title	Total Units	Units	Lec	Lab	Prerequisite
Physics 121	Waves, Optics and Thermodynamics	3	2	1		Physics 111
Math 121	Calculus (Integrative)	4	4	0		Math 111





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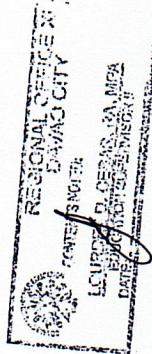
							volumes, moments etc., and with solution of simple differential equations.
Chem 100	Organic Chemistry	5	3	2	Chem 111	Lecture- this course is designed to introduce fundamental concepts of organic chemistry including hybridization, structure, nomenclature and the application of electronic and reactivity. The different classes of compounds are also covered.	
						Laboratory- an organic laboratory course designed to develop skills and techniques in the separation and purification of organic compounds. The laboratory course serves as the venue of for the observation of structural effects on the physical and chemical properties of organic compounds	
Bio 104	Ecology	3	2	1	NONE	This course deals with the study on the interrelationship among organisms and between organism and their environment.	
MB 121	Marine Botany	4	2	2	NONE	A 4-unit course designed to familiarize students with marine plants (mangrove and seagrass) and algae, their nature, evolution, classification, distribution, habitats, morphology physiology, and reproduction with additional topics on specimen processing and preservation.	
PE 2	Fitness Exercise	2	2	0	PE 1		
NSTP 2	NSTP II (CWTS/LTS/MTS 2)	3	3	0	NSTP 1	This designed to demonstrate skills and knowledge acquired in NSTP 1 by implementing the projects and activities suited to the needs and problems of the community, hence,	



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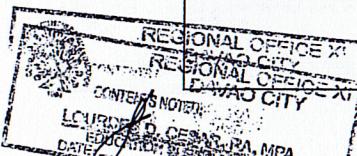
							uplifting the morale of the students as concerned and productive citizens.
		Total	24				





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SECOND YEAR / First Semester						
Course No.	Course Title	Total Units	Units		Prerequisite	Description
			Lec	Lab		
MB 211	Oceanography I	4	2	2	Physics 111 , Math 121	The Study of the physical setup of the oceans. (Geology, Physics). This course emphasizes the interdisciplinary process of the global processes of global oceanographic phenomena. Topics treated include the history and scope of oceanography, global tectonics, tsunami, ocean-atmosphere dynamics, coastal process, waves, and tides.
MB 212	Marine Zoology I (Invertebrates)	4	2	2	NONE	In this course, students will learn what marine invertebrates are, how they are classified, how each similar and different to ourselves and how each is connected to us. The Anatomy and life history of approximately 35 current recognized invertebrate phyla, their evolutionary relationships, and their ecological roles in marine environments will be covered. Students will go to habitats where marine invertebrates live including tide pools, experimental aquaria. This will include additional topics on specimen processing and preservation.
Chem 102	Biochemistry	3	2	1	Chem 100	This course covers the fundamental aspects of biochemistry and the structure and dynamics of important cellular components. The structure, properties, functions and metabolism of carbohydrates, proteins, lipids and other important biochemical compounds are also discussed.
Fil 1	Kontekstwalisadong Komunikasyon Sa Filipino (KOMFIL)	3	3	0	NONE	Ang KOMFIL ay isang praktikal na kursong nagpapalawak at nagpapalalim sa kontekstwalisadong komunikasyon sa wikang Filipino ng mga mamamayang Filipino sa kani-kanilang mga komunidad sa partikular, at sa buong lipunang Filipino sa pangkalahatan. Nakatuon





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Science 200	Earth Science	3	2	1	NONE	This 3-unit course deals with fundamentals and historical geology, Geologic process, such as rock formation, minerals and soil, weathering , erosion and mass movement, seismology, volcanism, plate tectonics will be emphasize. Issues concerning the importance, exploration, utilization and conservation of mineral resources will also be dealt w ¹ .
Lit 1	Sosyedad at Literatura/Panitikang Panlipunan (SOSLIT)	3	3	0	NONE	Ang SOSLIT ay isang kurso sa pag-aaral at paglikha ng pamitikang Filipino na nakatuon sa kabuluhang panlipunan ng mga tekstong literari sa iba't ibang bahagi ng kasaysayan ng bansang Pilipinas. Sinasaklaw nito ang mga isyung panlipunan na tina lakay ng mga akdang Filipino tulad ng kahirapan, malawak na agwata ng mayayaman at mahirap, reporma sa lupa, globalisasyon, pagsasamantala sa mga manggagawa, karapatang pantao, isyung pangkasanian, sitwasyon ng mga pangkat minorya at/o marhinalisado, at iba pa.
STS 121	Science, Technology, and Society	3	3	0	NONE	Interactions between science and technology and social, cultural, political and economic context which shape and are shaped by them; specific examples throughout human history of scientific and technological development.
SS 123	Art Appreciation	3	3	0	NONE	Nature, function and appreciation of the arts in contemporary society.
PE 4	Path-Fit 2 Sports and Advance Swimming	2	2	0	PE 3	Deals on group sports to enhance competition. The subject should be stressed on advanced swimming in marine waters. It includes approaches in life saving. It aims to foster closer relationship among students, develop individual skills, teamwork and cooperation. It provides opportunities for students to be physically and mentally healthy.
		Total	21			



THIRD YEAR / First semester						
Course No.	Course Title	Total Units	Units		Prerequisite	Description
Lec	Lab					
MB 311	Oceanography II	4	2	2	MB 211 Chem 111	The Study of the bio-chemical setup of the oceans.
MB 316	Marine Ecology	4	2	2	Bio 104 MB 121, MB 221	This course examines patterns of abundance and diversity of marine plants and animals and the general physico-chemical and biological processes that structure these patterns
Bio 105	General Physiology	3	2	1	Bio 102	This study deals with the basic organic process and phenomena of animals or any of its parts or of a particular bodily process. Discussions will be supported with laboratory activities.
Math 301	Inferential Statistics and Biometry	3	3	0	Math 111	This course will start with a descriptive statistics including the statistical measures that can be derived from a set of quantitative data. Random variables, discrete probability distributions, normal distributions, sampling theory and probability of events will be discussed. The topics of inferential statistics will be thoroughly discussed. This will start with formulation of the null and alternative hypothesis, the selection of appropriate statistical test, and construction of correct conclusions. Nonparametric methods will also be discussed. It Utilizes the use of computer software for data analysis like spss and excel.
Fil 3	Dalumat Ng/Sa Filipino (DALUMATFIL)	3	3	0	Fil 1	Ang DALUMATFIL ay isang maagwata na kursong nagpapalawak at nagpapalalim sa kasanayan sa malalim at mapanuring Pagbasa, pagsulat, at pananaliksik sa wikang filipino sa iba't ibang larangan, sa konteksto ng kontemporaryong sitwasyon at mga pangangailangan Ng bansa at ng mga mamamayang pilipino. Partikular na



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THIRD YEAR / Second semester						
Course No.	Course Title	Total Units	Units Lec	Units Lab	Prerequisite	Description
MB 321	Elements of Research	3	3	0	Math 301	A 3-unit course designed to provide an overview of the conduct of a scientific process and ethics in research. It will guide and motivate the students to practice scientific thinking, learn scientific process and writing of a scientific paper



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CESEN, PA., MPA
Regional Director



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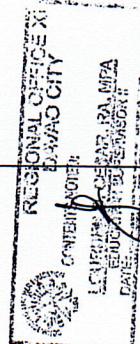
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MB Elec 3	Ichthyology	3	2	1	MB 221	Study of fishes giving emphasis in systematics, biology, Morphology, anatomy and physiology. This includes laboratory and actual exposure for the anatomical study and familiarization of the fishes. This will include additional topics on specimen processing and preservation.
MB 322	Coral Reefs	3	2	1	MB 316	This course deals with the biological and physical interactions that govern the functional mechanism of the coral reef ecosystem.
SS 113	The Contemporary World	3	3	0	NONE	Nature of Mathematics, appreciation of its practical, intellectual, and aesthetic dimensions, and application of mathematical tools in daily life.
SS 121	Ethics	3	3	0	NONE	Principles of ethics behavior in modern society at the level of the person, society and in interaction with the environment and other shared resources,
MB Res 1	Thesis 1	2	2	0	Co-Req: MB 321	Development of problem, sampling design, and method of management
SS 122	Life and Works of Rizal	3	3	0	NONE	This course studies the Life, Works and writings of Dr. Jose P. Rizal
	Total	20				

THIRD YEAR / Second semester					Description
Course No.	Course Title	Total Units	Units Lec	Lab	Prerequisite
MB 323	Practicum (200 hrs)	3	-	-	Passed all the foundation and core subjects from first year to third year.

A course involving activities emphasizing the practical application of theory and where the students going on the job experiences in the field of study in any local, regional, national or international agencies as host of institution.


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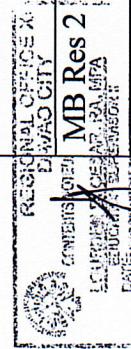
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															This can be in a form of training , a professional exposure in scientific expedition, mariculture, marine protected areas, scientific laboratories, research projects, etc.
		Total	3												

FOURTH YEAR / First semester

Course No.	Course Title	Total Units	Units Lec	Units Lab	Prerequisite	Description
Bio 106	Developmental and Reproductive Biology	3	2	1	Bio 102	This is the study of the comparative ontogenetic development of animals. Topics are emphasize on gametogenesis, fertilization, embryogenesis growth and differentiation, and the morphogenetic process in the late part of ontogenesis such as metamorphosis, regeneration and asexual reproduction. Discussion shall be linked to the phylogenetic history of organisms.
Bio 100	Genetics	4	3	1	Bio 102	Genetics (lecture) - this course deals with the principles of heredity and variations; its application in plant and animal breeding, and various problems involved in it. It also includes biometrical treatment of qualitative and quantitative characters of both plants and animals.
MB 411	Marine Micro & Fungi	4	2	2	MB 212	Genetics (Lab) - this course deals with, ecological, exercise on chromosomal basis of inheritance, structure of genetic material and Mendelian and Non- Mendelian.
	MB Res 2	2	2	0	MB Res 1, MB 321	General classification and familiarization in taxonomy of marine microorganisms. Distribution and importance of microorganisms and fungi in the marine habitats. Understanding the role of marine microbes and fungi in the ecosystem.
	Thesis 2					Data Gathering and Analysis





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		Total	13				
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FOURTH YEAR / Second semester							
Course No.	Course Title	Total Units	Units Lec	Units Lab	Prerequisite	Description	
						4	2
MB 421	Integrated Coastal Marine Resource Management	4	2	2	MB 316	A 4-unit course designed to introduce students to the principles and elements of integrated coastal/marine resource management.	
MB 422	Systematics, biodiversity and evolution	4	2	2	MB 121, MB 212, MB 311	A 4-unit course designed to introduce students to the principles and methods in identifying, classifying and naming organism and understanding their revolutionary relationships.	
MB Res 3	Thesis 3						
	Total	10			MB Res 2	Write-up and Presentation of Result	

Note: In the case of GE & major Electives, choose from among the given GE & major electives the semester offering based on the availability of faculty expertise, request of the students and other reasons favorable or advantageous to the students subject to the approval of the Dean.

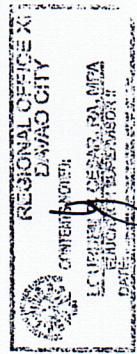
The options are as follows:

Electives				Total units	Units Lec	Units Lab	Prerequisite
MB Elec 1	Marine Plankton	3	2	1	MB 212		
MB Elec 2	Marine Pollution	3	2	1	MB 221		
MB Elec 3	Ichthyology	3	2	1	MB 221		
MB Elec 4	Phycology	3	2	1	MB 121		



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		Units Per Semester
FIRST YEAR	First semester	24
	Second semester	23
SECOND YEAR	First semester	21
	Second semester	21
THIRD YEAR	First semester	17
	Second semester	20
	Summer	3
FOURTH YEAR	First Semester	13
	Second Semester	10
	Grand Total	156





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New Visayas, Panabo City, Davao del Norte, Philippines 8105

Website: www.dnsc.edu.ph; Telephone #: 63 84 6284801; 6288203

Email Address: president@dnsc.edu.ph; jab@dnsc.edu.ph;

INSTITUTE OF AQUATIC AND APPLIED SCIENCES

New Visayas, Panabo City

**EXCERPTS FROM THE MINUTES OF THE BSMB CURRICULUM COMMITTEE
MEETING HELD ON APRIL 25, 2018 AT 10:00 o'CLOCK IN THE DNSC SCIENCE
BUILDING, PANABO CITY**

Present:

1. Rosie Lynn P. Tejada
2. Girley S. Gumanao
3. Joan Cristin E. Alipoyo
4. Julie S. Abarquez
5. Felicidad L. Forro

Resolution No. 01 Series 2018

Revision of the Bachelor of Science in Marine Biology (BSMB) Curriculum

WHEREAS, Section 13 of RA No. 7722, the Higher education institution shall exercise academic freedom in its curricular offerings but must comply with the minimum requirements for specific academic programs, general education distribution requirements and the specific professional courses.

WHEREAS, the last revision in the BSMB Program was on 2007, after 11 years there is a need to revise the BSMB curriculum considering the current needs and the subsequent CHED Memo orders issued;

WHEREAS, the BSMB Curriculum Committee convened to discuss the revision of the curriculum;

WHEREAS, upon comparison of the old and PSG for Marine Biology per CHED Memorandum Order (CMO) No. 46 series 2017, the body agreed that there is a need to revise the old curriculum.

WHEREAS, that there is a need to increase the units of Inorganic Analytical Chemistry from 3 units to 5 units, Organic Chemistry from 4 units to 5 units and to include the following electives: Marine Plankton; Marine Pollution; Ichthyology; and Phycology;

WHEREAS, on motion by Joan Cristin Alipoyo and unanimously seconded that the BSMB Curriculum be revised consistent on the CHED Memorandum Order (CMO) No. 46 series 2017 and the above considerations;

RESOLVED, that upon consideration of the foregoing, the BSMB curriculum be changed from 153 units to 156 units;

RESOLVED FURTHER, that a copy of this resolution will be submitted to the Academic Council for recommendation to the Board of Trustees.

I hereby certify to the correctness of the above quoted resolution.

ROSlE LYNN P. TEJADA
BSMB Program Chair

Attested:

GIRLEY S. GUMANAO
IAAS Dean



Republic of the Philippines

DAVAO DEL NORTE STATE COLLEGE

New Visayas, Panabo City, Davao del Norte 8105

www.dnsc.edu.ph | boardsec@dnsc.edu.ph | Tel. No. (084) 628-4301

Excerpts from the Minutes of the 2nd Quarter (94th) Regular DNSC Board of Trustees Meeting dated 16 May 2018, 1:00pm, at Park Inn By Radisson, Lanang, Davao City, Philippines.

DNSC BOARD OF TRUSTEES Resolution No. 024, Series of 2018

A Resolution Approving the following Revised Academic Programs, subject to the content notation and program compliance evaluation by CHED Regional Office XI:

1. Bachelor of Science in Fisheries and Aquatic Sciences;
2. Bachelor of Science in Food Technology;
3. Bachelor of Science in Marine Biology;
4. Bachelor of Secondary Education (English, Mathematics, Sciences);
5. Bachelor of Technology and Livelihood Education (*formerly BSED TLE*);
6. Bachelor of Science in Information Technology;
7. Bachelor of Public Administration; and
8. Bachelor of Science Social Work

- APPROVED -

Certified true and correct:

LEO D. RAYON, JR.
College and Board Secretary

Signed on 16 May 2018 at Lanang, Davao City, Philippines.

LILIAN A. DE LAS LLAGAS

Chair, DNSC Board of Trustees
Commissioner, Commission on Higher Education

JONATHAN A. BAYOGAN

Vice-Chair, DNSC Board of Trustees
College President, DNSC

FRANCIS JOSEPH G. ESCUDERO
Chair, Senate Committee on Higher Education

Represented by

SOFONIAS P. GABONADA, JR.
Member, DNSC Board of Trustees

MARIA LOURDES D. LIM
Member, DNSC Board of Trustees
Regional Director, NEDA XI

ROLANDO C. CASAWAY
Member, DNSC Board of Trustees
Private Sector Representative

KENNY ALLAN P. BENIGNO
Member, DNSC Board of Trustees
Faculty Representative

DULCE ANN K. HOFER

Chair, HOR Committee on Higher and Technical Education

Represented by

JOSEPH NOLAN H. JACINTO
Member, DNSC Board of Trustees

ANTHONY C. SALES

Member, DNSC Board of Trustees
Regional Director, DOST XI

DOMINADOR C. CASINO
Member, DNSC Board of Trustees
Private Sector Representative

MARJONE P. PONTILAR
Member, DNSC Board of Trustees
Alumni Representative

DAWN D. AGUADERA
Member, DNSC Board of Trustees
Student Representative

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8/21/18
Bot Secretary, DNSC



Republic of the Philippines
DAVAO DEL NORTE STATE COLLEGE
New Visayas, Panabo City, Davao del Norte, Philippines 8105
Website: www.dnsc.edu.ph; Telephone #: 63 84 6284301
Email Address: president@dnsc.edu.ph; pb@dnsc.edu.ph

September 17, 2018

RAUL C. ALVAREZ, JR., Ed.D., CESO III

Regional Director

Commission on Higher Education Regional Office XI

USeP Compound, Loyola Street

Bo. Obrero, Davao City



Dear Dir. Alvarez:

Greetings!

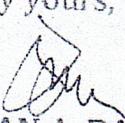
We are respectfully endorsing to you for content notation the Revised Curriculum and Prospectus of the three (3) programs of the Institute of Aquatic and Applied Sciences of the Davao del Norte State College, to wit:

1. Bachelor of Science in Fisheries and Aquatic Sciences;
2. Bachelor of Science in Food Technology;
3. Bachelor of Science in Marine Biology.

We appreciate your favorable action on this matter.

Thank you.

Very truly yours,


JONATHAN A. BAYOGAN, Ph.D.
College President