

Bachelor of Science in Environmental Science

Z S C M S T



BAGONG PILIPINAS



AREA II

Parameter F: PROFESSIONAL PERFORMANCE
AND SCHOLARLY WORKS

IMPLEMENTATION

I.1 |

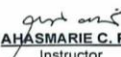
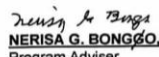
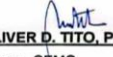
Demonstrate Skills and competencies in all
of the following:

I.1.5 the use of higher order thinking skills such
as analytical, critical, creative and innovative
and problem solving.



The faculty ensures that the design of major examinations is aligned with the program outcomes by integrating Higher Order Thinking Skills (HOTS) in the assessment process. This is clearly reflected in the Table of Specifications (TOS), which shows a balanced distribution of test items across the cognitive domains of Bloom's Taxonomy—from knowledge and comprehension (lower-order) to application, analysis, evaluation, and creation (higher-order).

INTENDED LEARNING OUTCOMES		No. of Hours	No. of Items	Percentage of Items	Bloom's Taxonomy					
					Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
✓	Discuss the origin and the evolution of solid waste management, and the extent of the problems brought by solid waste today.	3	8.00	14%	3,9,11,13,25-27	46				
✓	Discuss the guiding principles in SWM	3	8.00	14%	21,24,30	34,35,36		54		
✓	Describe the Solid Waste Situation in the Philippines and other countries.	3	8.00	14%		41,44		52		
✓	Define solid waste management.	3	8.00	14%	5,10,18,19,28	32,33,38,39,45,47,49,50		51		
✓	Explain the sources and types of solid waste.	2	5.33	10%	1,2,4,6,16,17,29	31,37				
✓	Calculate the composition of solid waste.	2	5.33	10%		40,48				
✓	Explain the effects of improper disposal of solid waste.	1	2.67	5%	20,23	42,		53		
✓	List and explain the solid waste handling, storage and processing.	2	5.33	10%	12,14,15,					
✓	Describe the actual practices on the use of solid waste containers, scheduled storage time for the solid waste and compare it with the requirements for segregation and storage for pending collection.	2	5.33	9%	7,8,22			55-56		
Total		21	56	100%						

Prepared by:	Reviewed by:	Approved by:
 AHASMARIE C. PASION, MSc Instructor	 NERISA G. BONGGO, MSc Program Adviser	 OLIVER D. TITO, Ph.D. Dean, CFMS

Sample Table of Specifications



Republic of the Philippines
ZAMBOANGA STATE COLLEGE OF MARINE SCIENCES AND TECHNOLOGY
 Fort Pilar, Zamboanga City



Table of Specifications
 Examination Period (/) Midterm () Finals

College: **COLLEGE OF FISHERIES AND MARINE SCIENCES**

Course Year & Section: **BSES III-A/BSES III-B**

Department: **Environmental Science**

Semester: **First Semester**

Course No. And Title: **ES 4 Hydrogeology**

School Year: **2023-2024**

INTENDED LEARNING OUTCOMES	No. of Hours	No. of Items	Percentage of Items	Bloom's Taxonomy					
				Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
✓ Discussed introduction to hydrology, its history and holistic view of the water environment.	6	18	33%	1,3,6,7,10,11,12,13,14,15,16,17,18,19			2,4,5,8		
✓ Identified the future challenges for groundwater management, the physical elements of the hydrology as good water conditions.	7	22	41%	26,27,28,31,32,35,37,38,40,47,48	45,46,49,50,52,53		29,39,41	54	51
✓ Discussed the different groundwater and geological processes and its affecting factors.	5	10	19%	20,21,22,25,33,34,42,43,			23,44		
✓ Identified the different properties of water, concepts of chemical equilibrium, carbonate chemistry of	6	4	7%	9,24,30			36		

modification are influencing agriculture today.									
✓ Discussed the fundamental principles of modern methods and teaching strategies in Environmental Science	6	7	23%		IV-35				
Total	28	35	100%						

Prepared by: AHASMARIE C. PASION, MSc
Instructor

Reviewed by: CHARITY T. CASTRO, MFM
Program Adviser

Approved by: OLIVER D. TITO, Ph.D.
Dean, CFMS

The inclusion of HOTS items in the exams demonstrates the faculty's intent to move beyond rote memorization, encouraging students to critically analyze concepts, apply theories to real-life scenarios, evaluate alternative solutions, and generate innovative ideas. Such an approach ensures that student learning is not only measured in terms of recall but also in their ability to think critically, solve problems, and make informed judgments in their field of specialization.