



BATAAN PENINSULA STATE UNIVERSITY COLLEGE OF EDUCATION

Dinalupihan 2100 Bataan
PHILIPPINES



Course Information:

Program	:	Bachelor of Elementary Education
Course Code	:	PRED2723
Course Title	:	Environmental Education
Course Description	:	This course is framed from Education for Sustainable Development (ESD) principles and provides pre-service teachers with a solid foundation of contemporary environmental issues confronting the planet. The course aims to equip aspiring educators with Pedagogical Content Knowledge toward meaningful practice of environmental education in their future classes. Emerging concerns in the increasingly complex society, including climate change action, biodiversity, pollution prevention, and environmental policies in the global and local contexts, shall be discussed along with practical strategies of integrating environmental concepts in various learning areas.
Course Credits	:	3 units, 3 hours lecture (for 18 weeks)
Pre-requisite	:	None
Co-Requisite	:	None
Schedule	:	TBA
Term & Academic Year	:	2 nd Semester, AY 2023-2024

- University Vision : An inclusive and sustainable University recognized for its global academic excellence by 2030.
- University Mission : To develop innovative leaders and empowered communities by delivering transformative instruction, research, extension, and production through Change Drivers and responsive policies.
- Program Outcomes :
- PO-001 - Articulate and discuss the latest developments in the specific field of practice (PQF level 6 descriptor)
 - PO-002 - Effectively communicate orally and in writing using both English and Filipino
 - PO-003 - Work effectively and independently in multi-disciplinary and multicultural teams (PQF level 6 descriptor)
 - PO-004 - Act in recognition of professional, social, and ethical responsibility
 - PO-005 - Preserve and promote “Filipino historical and cultural heritage” (based on RA 7722)
 - PO-006 - Participate in the generation of new knowledge or in research and development projects. (CMO 46, series of 2012)
 - PO-007 - Acquire the competencies to support “national, regional and local development plans. (RA 7722)
 - PO-008 - Articulate the rootedness of education in philosophical, socio-cultural, historical, psychological, and political contexts
 - PO-009 - Demonstrate mastery of subject matter/discipline
 - PO-010 - Facilitate learning using a wide range of teaching methodologies and delivery modes appropriate to specific learners and their environments
 - PO-011 - Develop innovative curricula, instructional plans, teaching approaches, and resources for diverse learners
 - PO-012 - Apply skills in the development and utilization of ICT to promote quality, relevant, and sustainable educational practices
 - PO-013 - Demonstrate a variety of thinking skills in planning, monitoring, assessing, and reporting learning processes and outcomes
 - PO-014 - Practice professional and ethical teaching standards sensitive to the local, national, and global realities

- PO-015 - Pursue lifelong learning for personal and professional growth through varied experiential and field-based opportunities
- PO-016 - Demonstrate in-depth understanding of the diversity of learners in various learning areas
- PO-017 - Manifest meaningful and comprehensive pedagogical content knowledge (PCK) of the different subject areas
- PO-018 - Utilize appropriate assessment and evaluation tools to measure learning outcomes
- PO-019 - Manifest skills in communication, higher order thinking and use of tools and technology to accelerate learning and teaching
- PO-020 - Demonstrate positive attributes of a model teacher, both as an individual and as a Professional
- PO-021 - Manifest a desire to continuously pursue personal and professional development

Course Outcomes		Program Outcomes																				
<i>Upon completion of the course, the students should be able to:</i>		PO-001	PO-002	PO-003	PO-004	PO-005	PO-006	PO-007	PO-008	PO-009	PO-010	PO-011	PO-012	PO-013	PO-014	PO-015	PO-016	PO-017	PO-018	PO-019	PO-020	PO-021
CO-001	Demonstrate a comprehensive understanding of environmental concepts and principles	L								L							P	L	P	P	O	O
CO-002	Effectively apply Pedagogical Content Knowledge (PCK) in Environmental Education	L								L							P	L	P	P	O	O
CO-003	Critically Analyze, Evaluate, and Advocate for Environmental Issues and Policies	L								L							P	L	P	P	O	O

Correlating Course Outcome and Program Outcome

(Lecture/Theory-Based Courses)

- L* Learned in the course
- P* Practiced in the course
- O* Not yet learned or practiced but there's an opportunity to exist

(Health-Related/Shop/Laboratory Courses)

- I* Introduce the skills in the course
- P* Practice skills in the course with supervision
- D* Demonstrate skills in the course without supervision

Course Outline and Learning Plan:

Week	Course Outcome Code	Learning Outcomes			Topic (Content)	Textbook / References	Methodology (Teaching-Learning Activities)	Resources (Instructional Resources)	Assessment (Tools and Tasks)	Time Frame	
		Knowledge	Skills	Attitude							
Week 1	--	Explain the importance of the University Mission and Vision, and apply the rules and behaviors required in the classroom		Behave according to the goals of the university.	Overview of the University Mission and Vision, Course Syllabus, Classroom Policies, Academic Code of Conduct	<ul style="list-style-type: none"> • BPSU Student Handbook • Course Syllabus 	<ul style="list-style-type: none"> • Brief Lecture • Small Group Discussion • Q and A 	<ul style="list-style-type: none"> • Laptop • Smart TV 	<ul style="list-style-type: none"> • Recitation • Q&A Forum 	0.5 hours	
Week 1	CO-001	Discuss the basic principles of environmental science and ecological concepts.	Develop a concept map illustrating the connections between environmental concepts.	Develop a sense of responsibility towards the environment and a commitment to sustainable practices.	Environmental and Ecological Concepts	<ul style="list-style-type: none"> • Introduction to environmental science • Basic ecological principles, including ecosystems, 	Principles of environmental science: Inquiry and applications by Cunningham & Cunningham (2016)	<ul style="list-style-type: none"> • Brief Lecture • Situation analysis • Q and A 	<ul style="list-style-type: none"> • Laptop • Smart TV 	<ul style="list-style-type: none"> • Chapter Test • Written Report 	2.5 hours

		Identify the key components of ecosystems and their interrelationships. Explain human impacts on the environment and ecosystems.	Analyze case studies demonstrating human impacts on ecosystems. Engage in discussions about the importance of environmental education and sustainability.	Cultivate an appreciation for the complexity and interconnectedness of ecological systems. Demonstrate openness to learning and exploring new ideas about environmental issues and solutions.	biodiversity, and ecological interrelationships • Human impacts on the environment and ecosystems					
Weeks 2-4	CO-001 CO-002	Explain the principles of Education for Sustainable Development (ESD), including its goals and guiding principles. Explain the role of educators in addressing contemporary environmental issues and promoting sustainability.	Apply pedagogical techniques for effectively teaching environmental and ecological concepts to diverse learners. Design and implement engaging lesson plans and activities that promote ecological literacy and sustainability.	Develop a sense of responsibility and commitment to integrating environmental education into teaching practices. Cultivate a passion for environmental stewardship and sustainability. Demonstrate enthusiasm and creativity in	Introduction to Environmental Education • Understanding the principles of Education for Sustainable Development (ESD) • Exploring the role of educators in addressing contemporary environmental issues • The role of environmental education in promoting ecological literacy and sustainability • Introduction to key concepts in environmental education	Principles of environmental science: Inquiry and applications by Cunningham & Cunningham (2016) Batchar, R., & Abad, G. (2022). Pre-service Teachers' Environmental Literacy and Readiness towards Environmental Education.	• Brief Lecture • Video Analysis (The Story of the Easter Island) • Group Reporting • <i>Introduction to the Living Lab Project</i> • <i>Community Scanning to identify local problems</i> • <i>Presentation and critiquing of proposed topics/problems</i>	• Laptop • Smart TV	• Chapter Test • Written Report	9 hours

		<p>Identify key concepts in environmental education, such as sustainability, ecological literacy, and stewardship.</p> <p>Describe pedagogical approaches for teaching environmental and ecological concepts in the classroom, including experiential learning, inquiry-based learning, and place-based education.</p>	<p>Utilize educational resources and materials to enhance environmental education curriculum and instruction.</p>	<p>engaging students in environmental education activities and discussions.</p>	<ul style="list-style-type: none"> • Pedagogical approaches for teaching environmental and ecological concepts in the classroom • The Living Lab as a Pedagogy to promote Environmental Literacy 					
<p>Weeks 5-6</p>	<p>CO-001 CO-002</p>	<p>Describe the causes and consequences of climate change.</p> <p>Identify mitigation and adaptation strategies for addressing climate change.</p>	<p>Analyze data and evidence related to climate change impacts.</p> <p>Evaluate the effectiveness of different strategies for mitigating and</p>	<p>Develop a sense of urgency and responsibility towards addressing climate change.</p> <p>Cultivate a mindset of innovation and creativity in finding</p>	<p>Climate Change and Sustainable Living</p> <ul style="list-style-type: none"> • Causes and consequences of climate change • Mitigation and adaptation strategies • Promoting sustainable lifestyles and consumption patterns 	<p>Principles of environmental science: Inquiry and applications by Cunningham & Cunningham (2016)</p>	<ul style="list-style-type: none"> • Brief Lecture • Mini Research involving Carbon Footprint analysis • Group Presentation • Living Lab Project Implementation and Monitoring 	<ul style="list-style-type: none"> • Laptop • Smart TV 	<ul style="list-style-type: none"> • Chapter Test • Written Report 	<p>6 hours</p>

		Explain the importance of promoting sustainable lifestyles and consumption patterns.	adapting to climate change. Develop action plans for promoting sustainable living practices in personal and community contexts.	sustainable solutions. Demonstrate resilience and adaptability in the face of climate-related challenges.	<ul style="list-style-type: none"> Integrating climate change education across the curriculum 					
Weeks 7-8	CO-001 CO-002	Explain the importance of biodiversity conservation for ecosystem health and resilience. Identify threats to biodiversity loss and their impacts on ecosystems and human well-being. Describe conservation strategies and initiatives aimed at protecting biodiversity.	Analyze case studies of successful biodiversity conservation projects. Evaluate the effectiveness of different conservation strategies in preserving biodiversity. Develop biodiversity conservation plans for specific habitats or species.	Develop a sense of appreciation and wonder for the diversity of life on Earth. Cultivate a commitment to biodiversity conservation and stewardship. Demonstrate empathy and compassion towards endangered species and ecosystems.	<p>Biodiversity Conservation</p> <ul style="list-style-type: none"> Importance of biodiversity Threats to biodiversity loss Conservation strategies and initiatives Engaging students in biodiversity conservation projects 	Principles of environmental science: Inquiry and applications by Cunningham & Cunningham (2016) The IUCN red list of threatened species	<ul style="list-style-type: none"> Brief Lecture Film Viewing Reflection writing Living Lab Project Implementation and Monitoring 	<ul style="list-style-type: none"> Laptop Smart TV 	<ul style="list-style-type: none"> Chapter Test Reflection paper 	6 hours

Week 9	MIDTERM EXAMINATION WEEK									3 hours
Weeks 10-11	CO-001 CO-003	<p>Understand the intersectionality of gender and environmental issues.</p> <p>Identify gender disparities in access to resources and environmental decision-making.</p> <p>Recognize the gendered impacts of environmental degradation and disasters.</p>	<p>Analyze case studies highlighting the gender dimensions of environmental issues.</p> <p>Evaluate the effectiveness of gender-responsive approaches in addressing environmental challenges.</p> <p>Develop strategies for promoting gender equity and empowerment in environmental policies and initiatives.</p>	<p>Develop a commitment to gender equality and social justice in environmental action.</p> <p>Cultivate empathy and understanding towards individuals and communities affected by gender disparities in environmental contexts.</p> <p>Demonstrate respect and inclusivity in engaging with diverse perspectives on gender and the environment.</p>	<p>Gender and the Environment</p> <ul style="list-style-type: none"> Understanding the intersectionality of gender and environmental issues Analyzing gender disparities in access to resources and environmental decision-making Examining the gendered impacts of environmental degradation and disasters Promoting gender equity and empowerment in environmental policies and initiatives 	Geneva Environment Network. (2024). Gender and the environment.	<ul style="list-style-type: none"> Brief Lecture Mini case study Group reporting Living Lab Project Implementation and Monitoring 	<ul style="list-style-type: none"> Laptop Smart TV 	<ul style="list-style-type: none"> Chapter Test Written Report 	6 hours
Weeks 12-13	CO-001 CO-003	Describe different types and sources of pollution and their impacts on	Analyze data on pollution levels and trends in specific	Develop a sense of responsibility and accountability towards reducing	<p>Pollution Prevention and Waste Management</p> <ul style="list-style-type: none"> Types and Sources of Pollution 	Principles of environmental science: Inquiry and applications by Cunningham	<ul style="list-style-type: none"> Brief Lecture Group presentation Living Lab Project 	<ul style="list-style-type: none"> Laptop Smart TV 	<ul style="list-style-type: none"> Chapter Test Written Report 	

		ecosystems and human health. Discuss the importance of waste reduction, recycling, and composting in pollution prevention. Identify strategies for implementing effective waste management programs in schools and communities.	regions or ecosystems. Evaluate the effectiveness of different pollution prevention and waste management strategies. Develop action plans for implementing waste reduction and recycling initiatives in local contexts.	pollution and managing waste. Cultivate a commitment to adopting sustainable practices in personal and community lifestyles. Demonstrate leadership and initiative in advocating for pollution prevention and waste management solutions.	<ul style="list-style-type: none"> • Impacts of Pollution on Ecosystems and Human Health • Waste reduction, recycling, and composting • Implementing waste management programs in schools 	& Cunningham (2016)	Implementation and Monitoring			
Weeks 14-15	CO-001 CO-003	Explain the role of environmental policies in addressing global and local environmental challenges. Identify key stakeholders and institutions involved in	Analyze the strengths and weaknesses of existing environmental policies and regulations. Evaluate the effectiveness of different approaches to environmental governance	Develop a sense of civic responsibility and engagement in environmental advocacy and activism. Cultivate a commitment to participatory decision-making and	<p>Environmental Policies and Governance</p> <ul style="list-style-type: none"> • Overview of global environmental policies • Analysis of local environmental policies and regulations • Understanding the role of government agencies and NGOs in environmental governance 	United Nations Environment Programme [UNEP]. (2024). Environmental governance.	<ul style="list-style-type: none"> • Brief Lecture • Argumentation and debate • Living Lab Project Implementation and Monitoring 	<ul style="list-style-type: none"> • Laptop • Smart TV 	<ul style="list-style-type: none"> • Chapter Test • Oral presentation 	6 hours

		environmental governance. Describe advocacy strategies for promoting environmental policy change and reform.	and decision-making. Develop advocacy campaigns and initiatives for advancing environmental policy goals.	democratic governance in environmental policy processes. Demonstrate resilience and perseverance in advocating for environmental policy change.	<ul style="list-style-type: none"> • Advocacy and activism for environmental policy change 					
Weeks 16-17	CO-001 CO-002 CO-002	Understand the importance of integrating environmental concepts into various subject areas. Identify strategies for developing interdisciplinary environmental education units. Describe hands-on activities and project-based learning approaches for teaching environmental concepts.	Develop lesson plans that integrate environmental concepts into different subject areas (e.g., science, social studies, language arts). Collaborate with colleagues to develop interdisciplinary environmental education units. Facilitate hands-on activities and	Develop a sense of creativity and innovation in designing environmental education curriculum and activities. Cultivate a collaborative and cooperative approach to interdisciplinary teaching and learning. Demonstrate enthusiasm and passion for engaging students in meaningful environmental	<p style="text-align: center;">Integrating Environmental Education Across the Curriculum</p> <ul style="list-style-type: none"> • Strategies for integrating environmental concepts into various subject areas (e.g., science, social studies, language arts) • Developing interdisciplinary environmental education units • Hands-on activities and project-based learning approaches • Collaborative planning and resource sharing among educators 	Sharma, K., & Pandya, M. (2015). Towards a Green School: On Education for Sustainable Development for Elementary schools	<ul style="list-style-type: none"> • Brief Lecture • Writing lesson plans with ESD integration • Micro-demonstration teaching • Living Lab Project Final Presentation 	<ul style="list-style-type: none"> • Laptop • Smart TV 	<ul style="list-style-type: none"> • Chapter Test • Individual performance • Group Performance (living lab) 	6 hours

			project-based learning experiences for students.	education experiences.						
Week 18	INTEGRATION AND FINAL EXAMINATION									3 hours

Readings and References:

- Batchar, R., & Abad, G. (2022). Pre-service Teachers' Environmental Literacy and Readiness towards Environmental Education. *International Journal of Innovation Scientific Research and Review*, 5(3), 4185–4195. https://journalijisr.com/sites/default/files/issues-pdf/IJISRR-1179_0.pdf
- Cunningham, W. P., & Cunningham, M. A. (2016). *Principles of environmental science: Inquiry and applications*. Boston: McGraw-Hill.
- Chandran, R., Gunawardena, C., & Castro, N. (2017). The National Environmental Education Action Plan 2018-2040. Department of Environment and Natural Resources. Retrieved February 15, 2024, from https://eed.emb.gov.ph/wp-content/uploads/2020/07/National_Environmental_Education_Action_Plan_NEEAP.pdf
- Geneva Environment Network. (2024). Gender and the environment. Retrieved February 10, 2024, from <https://www.genevaenvironmentnetwork.org/resources/updates/gender-and-the-environment/>
- Sharma, K., & Pandya, M. (2015). *Towards a Green School: On Education for Sustainable Development for Elementary schools* [E-book]. National Council of Educational Research and Training
- United Nations Environment Programme [UNEP]. (2024). Environmental governance. UNEP - UN Environment Programme. <https://www.unep.org/regions/west-asia/regional-initiatives/environmental-governance>
- *The IUCN red list of threatened species*. (n.d.). IUCN Red List of Threatened Species. <https://www.iucnredlist.org/>

Course Output (Performance Indicators)

Course Outcomes		Course Major Output (Major Task Assessment Tool)	Due Date
<i>Upon completion of the course, the students should be able to:</i>			
CO-001	Demonstrate a comprehensive understanding of environmental concepts and principles	Reflective Essay	TBA
CO-002	Effectively apply Pedagogical Content Knowledge (PCK) in Environmental Education	Mini Demonstration Teaching with ESD Integrated Lesson Plan	TBA
CO-003	Critically Analyze, Evaluate, and Advocate for Environmental Issues and Policies	Mini Case Study	TBA
Final Requirement (Final Task Assessment)		Living Laboratory Project Presentation	TBA

Grading System

Class Standing	Percentage
Quizzes	40%
Class Participation (Activity Sheets)	30%
Course Outputs	30%
TOTAL	100%

Midterm		Final	
Class Standing	- 70%	Class Standing	- 70%
Term Exam	- 30%	Term Exam	- 30%
Final Rating			
Midterm Grade (50%) + Final Grade (50%) = Final Rating			


Course Policies and Standards:

The following policies are to be observed and implemented inside the classroom by both the Professor and Students.

- Attendance and punctuality must be strictly observed.
- Maintain respect and discipline.

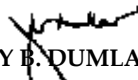
- Active participation in the discussion through sharing of ideas and experiences is encouraged.
- Observe tranquility so as to maintain an environment of focus learning.
- Always check the shared folder/s for relevant readings.
- Be prompt in submitting reports and other requirements.

Prepared and Submitted by:

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