



Course Information					
Code:	CMA61027	Course:	ESTRATEGIA Y PLANIFICACIÓN AMBIENTAL		
Coordination Area / Program:	FAC. INGENIERÍA: ING. AMBIENTAL			Mode: Presencial	
Credits: 02	Tipo de hora	Presencial	Virtual	H. Totales	Autonomous Learning Hours: 64
	H.Teoria	0	0	0	
	H.Práctica	64	0	64	
	H.Laboratorio	0	0	0	
Period: 2024-01	Start date and end of period: del 20/03/2024 al 09/07/2024				
Career: INGENIERÍA AMBIENTAL					

Course Pre-requisites		
Code	Course - Credits	Career
	> 120 Créditos.	INGENIERÍA AMBIENTAL

Course Coordinators			
Surname and First Name	Email	Contact Hour	Contact Site
DELGADILLO PANDURO, LILIANA ROCIO	ldelgadillo@usil.edu.pe	L-V 9:00am - 5:00pm	C1 pabellón C 3er piso área de Ingeniería

Instructors
You can check the timetables for each teacher in their INFOSIL in the Classes Development Teachers option Teachers .

Course Overview
Environmental strategy and planning is a specialized training course of a practical nature. Its purpose is to provide advanced knowledge related to strategic environmental management in a company and/or a project, applying it to consulting, project management or auditing processes. It includes environmental strategies; planning, projects; monitoring and control. The accredited product of the course is a final report of the development of a research on a topic of the course.

Competencias Profesionales y/o Generales

Carrera/Programa	Sigla/ Denominación de la Competencia	Nivel de la competencia	Aprendizajes esperados
ENVIRONMENTAL ENGINEERING	CG1: Comprehensive Communication	N1. Prepares written academic texts and generates oral communications making appropriate use of Spanish regulations, appropriate sources and resources, in which they express their critical judgment on certain specific academic, professional or social situations to contribute to the transformation of their diverse environments.	<ul style="list-style-type: none"> •Interprets and produces texts taking into account their internal structure, applying the regulations of English and adapting his production to the external structures requested. • Formulate arguments critically, in spoken or written form, taking into account other divergent points of view. •Communicates orally, in writing, and non-linguistically, understanding various messages in a variety of

contexts and for different purposes

. It uses, in its scientific production, reliable academic sources and resources, respecting the rules of academic writing proposed.

- Applies control and monitoring protocols in anthropogenic and natural environmental systems, taking into account professional ethics.

CP4: Ethical responsibilities

N3. Assesses ethical and professional responsibilities in engineering situations and makes informed judgments to determine the impact of engineering in global, economic, environmental and social contexts.

- It resolves current problematic environmental situations based on its solid qualities of ethical responsibility and together with interdisciplinary teams.
- Uses existing environmental legislation for the development of projects in the field of environmental engineering, with the ethical responsibility of the established regulations.

- Recognizes the importance of teamwork in the management of environmental engineering projects, considering environmental assessment instruments.
- Manages environmental projects taking into account the interaction with multidisciplinary teams.

CP5: Function in a team

N2. Applies resources and tools for environmental engineering, taking into account the theoretical foundations of citizen participation and social conflicts, to lead teams that create a collaborative and inclusive environment.

- Develops innovative strategies that minimize global problems, through strategic alliances with national and international organizations.

General Course Result	Unit Result
It develops environmental projects taking into account planning and strategy criteria.	1. Learn about trends in environmental management and sustainability.
	2. Formulate alternative solutions for complex environmental problems.
	3. Evaluate the strategies applied

Development of activities

Unit Result 1: Learn about trends in environmental management and sustainability.		
Session 1: Sustainability		Semana 1 a 3
Learning Activities	Contents	Evidence
Class Presentation Debate	Global Environment and Sustainability Strategies	Virtual Campus Class Progress of work Case Resolution
Session 2: Sustainability		Semana 4 a 6
Learning Activities	Contents	Evidence
Class Presentation Debate	Environmental management	Virtual Campus Class Progress of work Conclusion Generation Workshop
Unit Result 2: Formulate alternative solutions for complex environmental problems.		
Session 3: Environmental problems		Semana 7 a 8
Learning Activities	Contents	Evidence
Class Presentation Debate	Environmental problems	Virtual Campus Class Progress of work Case Resolution
Session 4: Environmental problems		Semana 9 a 11
Learning Activities	Contents	Evidence
Class Presentation Debate	Environmental problems	Virtual Campus Class Progress of work
Unit Result 3: Evaluate the strategies applied		
Session 5: Environmental planning		Semana 12 a 14
Learning Activities	Contents	Evidence
Class Presentation Debate	Techniques	Virtual Campus Class Progress of work Conclusion Generation Workshop
Session 6: Environmental techniques		Semana 15 a 16
Learning Activities	Contents	Evidence
Class Presentation Debate	Techniques	Virtual Campus Class Progress of work Final presentation

Methodology
<p>The course will be developed based on the following methodologies: The course will be developed based on the following methodologies: Given the applicative nature of the subject, an active and inductive methodology will be used, for which participatory-collaborative, investigative and project-based learning methods will be implemented.</p> <p>The teacher is a motivator and mediator of the learning process. Students apply what they have learned through field and class practices, solving exercises, problems and presentations of related topics. A variety of tools and materials will be used to facilitate learning, such as books, commissioned readings, lab guides, slides, and resources from the virtual platform.</p>

Assessment System				
<p>Each of the items of the evaluation scheme and the final grade of the course are rounded to whole numbers. The final grade of the course is the weighted average of the corresponding items: permanent evaluation, partial exam and final exam.</p> <p>The averages calculated components of the item 'Permanent Evaluation' will keep your calculation with 2 decimals.</p>				
Type Evaluation	%Weighing	Observation	Week Assessment	Rezag.
Evaluación Permanente	50%			
Promedio de Prácticas	100%			
Práctica 1	35%		Semana 4	No
Práctica 2	35%		Semana 9	No
Práctica 3	30%		Semana 11	No
Examen Final	50%	Creditable product.	Semana 16	No

Attendance Policy	
Total Percentage Absences Permitted	30%
<p>Class attendance is mandatory. The student who reaches or exceeds the limit of thirty percent (30%) of absences in the course, defined by the total of effective hours, will be disqualified from taking the final evaluation, corresponding to said evaluation with a grade of zero (0).</p> <p>In hybrid classrooms, only synchronous virtual participation (via zoom) is allowed, up to a maximum of 50% of the total course.</p>	

Basic Required Reading
<p>[1] Perú. Ministerio de Economía y Finanzas. Dirección General de Programación Multianual del Sector Público (2008). <i>Guía de identificación, formulación y evaluación social de proyectos de residuos sólidos municipales a nivel de perfil/ Elaborado por el Proyecto STEM del Ministerio del Ambiente y la Agencia de los Estados Unidos para el Desarrollo Internacional-USAID/Perú.</i> (N.A). Ministerio de Economía.</p> <p>[2] Consejo Nacional del Ambiente (Perú) (2005). <i>Plan Nacional de Gestión Integral de Residuos Sólidos / [Consejo Nacional del Ambiente ; coordinación, Rosa Salas, Juan Narciso].</i> (N.A). CONAM.</p> <p>[3] Pineda M., Samuel Ignacio (1988). <i>Manejo y disposición de residuos sólidos urbanos.</i> (N.A). ACODAL.</p>

References Supplementary
<p>[1] Leroy, Jean-Bernard (1987). <i>Los desechos y su tratamiento: Los desechos solidos, industriales y domiciliarios / Jean-Bernard Leroy.</i> (N.A.). Fondo de Cultura Económica.</p> <p>[2] Sbarato, Rubén Darío (2016). <i>Aspectos generales de la problemática de los residuos sólidos urbanos [recurso electrónico]</i></p> <p>[3] Shammah, Cinthia (2009). <i>El circuito informal de los residuos : los basurales a cielo abierto / Cinthia Shammah.</i> (N.A). Espacio Editorial.</p> <p>[4] Morris, A. Levin, Michael A. Gealt (1997). <i>Biotratamiento de residuos tóxicos y peligrosos.</i> https://books.google.com.pe/books/about/Biotratamiento_de_residuos_t%C3%B3xicos_y_pe.html?id=ljz-OwAACAAJ&redir_esc=y</p> <p>[5] Diaz de Santos (2009). <i>Reciclaje de residuos industriales : residuos sólidos urbanos y fangos de depuradora / Xavier Elias (Editor). (2). N.A.</i></p> <p>[6] Collazos Peñaloza, Héctor (2008). <i>Diseño y operación de rellenos sanitarios Recurso electrónico / Héctor Collazos Peñaloza. (3). Escuela Colombiana de Ingeniería.</i></p>

Prepared by:	Approved by:	Validated by:
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Date: 03/04/2024	Date: 18/04/2024	Date: 18/04/2024