

ENVIRONMENTAL EDUCATION AND SOCIO-COMMUNITY PARTICIPATION FOR THE SUSTAINABILITY OF CITIES (MASTED-02-12)				
DEGREE PROGRAM:		Master in integrated STEAM Education (MASTED)		
SEMESTER: Second	TYPE: Basic	CREDITS: 4 ECTS	WORKLOAD: 100 hours	MENTORING: 6 hours/week
LANGUAGE: Spanish/English friendly				

OBJECTIVES

General	This subject enables students to acquire specific training for innovation, research, and intervention in environmental education for sustainability in urban contexts.
Specific	<ul style="list-style-type: none"> Identifying particular issues and challenges related to the sustainability of cities. Learning about risks and strategies to mitigate climate change such as nature-based solutions. Recognising the relationship between social, environmental, health and sustainability issues. Contributing to sustainable development goals related to education, inclusion, equity. Learning about social movements: ecofeminism and eco-citizenship. Recognising the importance of the gender perspective, intergenerationality, and interculturality as pillars for ethical and global environmental justice.

SUBJECT MATTER

SOCIO-ENVIRONMENTAL ISSUES OF CITIES:
Transportation, noise, energy consumption, water, and natural resource consumption. Environmental health. Drivers of global change. Environmental risk assessment. Environmental health and human health, two sides of the same coin. Environmental health determinants. The One Health initiative. Environmentally sustainable health systems. Habitability and ecological footprint. Nature-based solutions for mitigating climate change in cities. Sustainability of urban environments: individual and collective responsibility. Environmental sustainability indicators in Andalusia: Methods and scale. Urban sustainability goals: interculturality and quality of life. Social actors related to the implementation of Sustainable Development Goals in neighbourhood areas. Participatory strategies for resolving socio-environmental conflicts. Environmental education as a tool for social transformation towards ecocitizenship. The role of social movements in urban sustainability. Ecofeminism. Co-creating proposals for environmental citizenship. Intersectional proposals: Gender perspective, intergenerationality, and interculturality as pillars for ethical and global environmental justice.

THEORETICAL SYLLABUS:

- Module 1: Environmental Education, Environmental Health, and Human Health. Environmental health and human health, two sides of the same coin. Nature-based solutions. The One Health initiative. Participatory models in sustainable management.
- Module 2: Contributions of Ecofeminism to the SDGs. Co-creation and environmental citizenship. Intersectional proposals: Gender perspective, intergenerationality, and interculturality as pillars for ethical and global environmental justice.
- Module 3: Sustainability of urban environments: individual and collective responsibility. Social actors related to the implementation of Sustainable Development Goals in neighbourhood areas. Ecocitizen strategies for resolving socio-environmental conflicts and social transformation.

PRACTICAL SYLLABUS:
Co-creative Design Challenge using Visual Thinking.
Case studies: Participatory models in the sustainable management of natural resources.
Problem-Based Learning, using didactic itineraries to assess the sustainability of cities.
Exercises and practical cases linked to the resolution of urban socio-environmental issues.

COMPETENCES

- C1: Developing knowledge and understanding in innovation, research, and intervention in environmental education for sustainability in urban contexts.
- C2: Developing advanced cognitive and procedural skills associated with knowledge development and creation.
- C3: Developing of plans and organising and innovating the teaching/learning process, as well as to apply the plan and to assess its application.
- C4: Developing and using of a wide range of strategies to organise the classroom/learning space and foster learning.
- C12: Developing critical literacy competence.
- C13: Developing citizenship competence.
- C18: Acting for sustainability.

LEARNING OUTCOMES

Knowledge	<ul style="list-style-type: none"> • Issues and challenges related to the sustainability of cities. • Risks and strategies to mitigate climate change such as nature-based solutions. • Relationship between social, environmental, health and sustainability issues. • Sustainable development goals related to education, inclusion, equity. • Social movements: ecofeminism and eco-citizenship. • Gender perspective, intergenerationality, and interculturality as pillars for ethical and global environmental justice.
Skills	<ul style="list-style-type: none"> • Cooperation. • Communication skills. • Literature search skills. • Critical reading and discussion of key literature. • Design of educational interventions applying the knowledge learned through the subject.
Attitudes/values	<ul style="list-style-type: none"> • Valorisation of science and scientific research as the big reference for knowledge, socio-scientific development and research-based education. • Respect for others' opinions and different perspectives. • Responsibility for own actions and environmental citizenship. • Commitment to the development of a well-educated and more sustainable world.

TEACHING METHODS

The teaching methodology applied for the development of this subject is:

- Participatory Master Lecture.
- Problem/Project-Based Learning.
- Dialogue and Debate-Based Learning.
- Cooperative/Collaborative Learning.
- Challenge-Based Learning.

This methodology translates into the following training activities:

- Theoretical classes.
- Practical classes.
- Seminars.
- Case studies.
- Tutorials.
- Group work and/or collaborative student work for the generation of individual and/or shared knowledge.
- Group tutorials.
- Self-assessment and co-assessment activities.
- In-person and public presentation of works.

EVALUATION

The following evaluation system is established as follows:

- Quality of tasks associated with the achievement of the learning outcomes of this subject: 40%.

	<ul style="list-style-type: none"> • Correction of the in-person knowledge validation test. In-person and public presentation: 30%. • Participation in theoretical-practical classes, debates, workshops, field trips, and seminars: 20%. • Self-assessment and peer-assessment.
PRECONDITIONS	
None	
DEPARTMENT	Animal biology, plant biology, and ecology; Didactics of Sciences
LECTURERS	María Gema Parra Anguita María del Consuelo Díez Bedmar
LITERATURE	<p>Basic Literature:</p> <ul style="list-style-type: none"> • Bocaccia, T. (2020). Ciudades sostenibles y género: el compromiso de las redes de mujeres para la Nueva Agenda Urbana. <i>Ciudad y Territorio, estudios territoriales</i>, 203, 13-31. https://doi.org/10.37230/CyTET.2020.203.02 • Buades-Fuster, J. y Giménez-Romero, C. (Coord.). (2013). Hagamos de nuestro barrio un lugar habitable. Manual de intervención comunitaria en barrios. Tirant lo Blanch. • Kanuri, C., Revi, A., Espey, J. y Kuhle, J. (2016). Cómo implementar los ODS en las ciudades. Sustainable Development Solutions Network (SDSN). • Limón Domínguez, D. (2019). Ecociudadanía: retos de la educación ambiental ante los objetivos de desarrollo sostenible. Octaedro. • Ministerio de Agricultura, Alimentación y Medio Ambiente (2012). Libro Verde de Sostenibilidad Urbana y Local en la Era de la Información. Catálogo de Publicaciones de la Administración General del Estado. https://www.mitma.gob.es/recursos_mfom/pdf/9982755F-02CF-47D9-9571-0723387D66F7/130252/Libro_Verde_Final_15012013_tcm7247905.pdf • Ministerio para la Transición Ecológica y el Reto Demográfico (2021). Plan de Acción de Educación Ambiental para la Sostenibilidad (2021-2025). https://www.miteco.gob.es/es/ceneam/plan-accion-educacion-ambiental.html • Trencher, G.P., Yarime, M., & Kharrazi, A. (2013) Co-creating sustainability: cross-sector university collaborations for driving sustainable urban transformations. <i>Journal of Cleaner Production</i>, 50, 40-55, https://doi.org/10.1016/j.jclepro.2012.11.047 • Tójar-Hurtado, J. C., Martín-Jaime, J. J., & Velasco-Martínez, L. (2022). Metodologías participativas para el análisis de la realidad socioeducativa. En L. M. d. Águila & J. M. d. Oña Cots (eds.), <i>Más allá de lo obligatorio: Alternativas educativas en el grado de Educación Social</i> (pp. 96-117). Dykinson. • Yustos, J.L. (2018). Gestión de conflictos en asuntos socio-ambientales. CENEAM (Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente). https://www.miteco.gob.es/es/ceneam/articulos-de-opinion/2018-02-seli-yustos_tcm30-439821.pdf <p>Complementary Literature:</p> <ul style="list-style-type: none"> • Alonso-Leal, N., Campos-Fernández de Piérola, S., Majadas-Andray, J., Piñeiro-García de León, C., & Sampedro-Ortega, Y. (2012). La mirada mediadora en los conflictos socioambientales. <i>Cuadernos Entretantos</i>, 10, 1-55. Fundación Entretantos. • Bartual Figueras, M. T., & Pareja Eastaway, M. (2015). Procesos participativos de gestión para la sostenibilidad del desarrollo rural. El caso CETs (Carta Europea de Desarrollo Sostenible) en el Delta del Ebro, España. <i>Revista Interamericana de Ambiente y Turismo</i>, 11(1), 16-30. https://riat.usalca.cl/index.php/test/article/view/303/pdf • Bousset, J. P., Macombe, C., & Taverne, M. (2005). Participatory methods, guidelines and good practice guidance to be applied throughout the project

to enhance problem definition, co-learning, synthesis and dissemination. SEAMLESS, 10.

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