

INNOVATIVE SEMINARS FOR THE PROFESSIONAL DEVELOPMENT OF ENVIRONMENTAL EDUCATORS (MASTED-02-13)				
DEGREE PROGRAM:		Master in integrated STEAM Education (MASTED)		
SEMESTER: Second	TYPE: Basic	CREDITS: 6 ECTS	WORKLOAD: 150 hours	MENTORING: 6 hours/week
LANGUAGE: Spanish/English friendly				

OBJECTIVES	
General	The main aim of this subject is to provide educators with the knowledge, skills, strategies and resources necessary to identify relevant socio-environmental problems, make a diagnosis of needs and design, run and evaluate projects aimed at the co-creation of sustainable and participatory solutions.
Specific	<ul style="list-style-type: none"> • Addressing environmental issues locally and globally relevant. • Collecting information and running surveys for the analysis of needs. • Co-designing and co-creating solutions based on the description of the problem and the analysis of needs. • Engaging stakeholders in co-creation processes and providing a sense of empowerment and ownership in the implementation of strategies to improve the close environment. • Designing and running environmental projects for sustainability. • Evaluating projects of environmental education for sustainability.
SUBJECT MATTER	
<ul style="list-style-type: none"> • Design of environmental projects for sustainability. • How to address environmental issues locally and globally relevant. • Diagnoses of socio-environmental problems. • Design and co-creation of solutions based on the description of the problem and the analysis of needs. • How to engage stakeholders in co-creation processes and providing a sense of empowerment and ownership in the implementation of strategies to improve the close environment. • Evaluation of projects of environmental education for sustainability. 	
COMPETENCES	
<ul style="list-style-type: none"> • C1: Developing knowledge and understanding in socio-environmental problems. • C2: Developing advanced cognitive and procedural skills associated with knowledge development and creation. • C5: Developing of assess in order to evidence learning and to improve the learning process and the teaching practices. • C8: Professional development and self-reflection. • C9: Integrating the theoretical knowledge acquired throughout the course with field practice. • C10: Developing communication and cooperation skills with different stakeholders. • C12: Developing critical literacy competence. • C13: Developing citizenship competence. • C17: Embracing complexity in sustainability. • C18: Acting for sustainability. 	
LEARNING OUTCOMES	
Knowledge	<ul style="list-style-type: none"> • Understands the epistemological perspectives of environmental education, embracing the critical, complex, transdisciplinary, and constructivist perspectives as the foundation for a research model or the design of intervention strategies in environmental education. • Critical understanding of literature and research relevant to environmental education. • Understanding the role of environmental education in fostering citizenship and sustainable practices.

	<ul style="list-style-type: none"> Understanding the complex nature of sustainability issues and their interconnections.
Skills	<ul style="list-style-type: none"> Advanced skills in applying theoretical knowledge to real-world environmental issues. Skills in assessing and evaluating the effectiveness of environmental education programs. Skills to apply theoretical knowledge in practical, real-world environmental settings. Skills to communicate effectively and collaborate with diverse stakeholders in environmental projects. Skills in designing and implementing environmental projects that contribute to sustainability. Practical skills in designing, implementing, and managing environmental projects with a focus on sustainability. Skills to identify and address environmental issues at both local and global levels. Research skills to collect and analyse information for understanding environmental needs. Collaborative skills to work with stakeholders in developing solutions based on identified environmental problems. Skills to involve and empower stakeholders in the development and implementation of environmental strategies. Evaluation skills to assess the success and impact of environmental education projects.
Attitudes/values	<ul style="list-style-type: none"> Attitude toward continuous professional development and reflection on environmental education practices. Proactive attitude toward taking actions that contribute to sustainability.
TEACHING METHODS	
<p>The teaching methodology applied for the development of this subject includes:</p> <ul style="list-style-type: none"> Participatory Lecture Problem/Project-Based Learning Dialogue and Debate-Based Learning Challenge-Based Learning Cooperative/Collaborative Learning Learning Contract Service Learning <p>This methodology translates into the following formative activities:</p> <ul style="list-style-type: none"> Theoretical Classes Practical Classes Case Studies Seminars Autonomous and/or collaborative student work for the generation of individual and/or shared knowledge Group Tutorials Self-assessment Activities Co-assessment Activities 	
EVALUATION	
<p>Attendance and/or participation: 15.0%</p> <p>Written test on theoretical concepts of the subject: 10.0%</p> <p>Completion/presentation of assignments, cases, or practical exercise solutions: 60.0%</p> <p>Self-assessment: 15.0%</p>	
PRECONDITIONS	
None	
DEPARTMENT	Didactics of Sciences
LECTURERS	Marta Romero Ariza

	<p>Ana María Abril Gallego María Gema Parra Anguita Maria Consuelo Díez Bedmar.</p>
<p>LITERATURE</p>	<ul style="list-style-type: none"> • Acar Şeşen, B., & Mutlu, A. (2022). Project-Based Learning on Socio-scientific Issues in Environmental Education. <i>Journal of Hasan Ali Yücel Faculty of Education/Hasan Ali Yücel Eğitim Fakültesi Dergisi (HAYEF)</i>, 19(2). • Aguirregabiria Barturen, J., & García Olalla, A. M. (2020). Aprendizaje basado en proyectos y desarrollo sostenible en el Grado de Educación Primaria. <i>Enseñanza de las ciencias: revista de investigación y experiencias didácticas</i>. • Capdevila, Y., & Prado, S. (2021). Diálogos y convergencias para una educación ambiental: el ABP como experiencia educativa. <i>Cadernos de Estágio</i>, 3(2). • Collazo Expósito, L. M., & Geli de Ciurana, A. M. (2017). Avanzar en la educación para la sostenibilidad: combinación de metodologías para trabajar el pensamiento crítico y autónomo, la reflexión y la capacidad de transformación del sistema. <i>Revista iberoamericana de educación</i>. • Genc, M. (2015). The project-based learning approach in environmental education. <i>International Research in Geographical and Environmental Education</i>, 24(2), 105-117. • Hernández, J. H. L., & Jiménez, M. A. (2020). Aprendizaje Basado en Problemas (ABP) como estrategia para promover la formación Educativa Ambiental en estudiantes universitarios: una aproximación desde la Didáctica. <i>REVISTAS DE INVESTIGACIÓN</i>, 43(98). • Sandoval Vega, B. E., & Hernández Briseño, V. (2018). Aprendizaje basado en Problemas: Una Alternativa para la Creación de Situaciones de Aprendizaje Orientadas a una Educación Ambiental Activa. • Losada, M. M. V., Rodríguez, U. P., Lires, M. M. Á., & Lires, F. J. Á. (2013). El aprendizaje basado en problemas como propuesta didáctica de educación ambiental para la sostenibilidad en formación inicial de profesorado. <i>Enseñanza de las ciencias: revista de investigación y experiencias didácticas</i>, (Extra), 3618-3623. • Perrault, E. K., & Albert, C. A. (2018). Utilizing project-based learning to increase sustainability attitudes among students. <i>Applied Environmental Education & Communication</i>, 17(2), 96-105.