***Interdisciplinary Minor in Climate Change and Sustainability Policy***

As a response to these challenges, the UNESCO Chair ICT in Education for Sustainable Development at the University of Crete has initiated and developed the ***Climate Change and Sustainability Policy*** (CLIMASP) project proposal that has been funded through the European Commission Tempus program. CLIMASP adopts a multi/inter-disciplinary and systemic approach that, at a wider level, aims to transform current unsustainable practices leading to climate change and promote interdisciplinary collaboration alongside with developing

sustainable leadership in the partner countries' universities (Makrakis & Kostoulas- Makrakis, 2015). Specific objectives, within the aforementioned wider ones, include the:

1. Development of capacity-building programs to train university teaching staff

and key administrators for interdisciplinary collaboration and building partnerships with local/national/regional partners;

1. Involvement of university staff and other key stakeholders (e.g., students, professionals, employers) in the development of an undergraduate interdisciplinary programs (minors) on climate change and sustainability policy in each partner country university;
2. Integration and implementation of the interdisciplinary minors as an integral part to existing undergraduate academic degrees in disciplines like education sciences, applied sciences, technical sciences, economics/business sciences, and social sciences; and
3. Monitoring, evaluation and review of the interdisciplinary programs on climate change and sustainability policy in each partner country institution.

The key outcome of the CLIMASP project is the development of interdisciplinary minors in 10 partner universities in the MENA region (Egypt, Jordan and Lebanon). Each partner university has mapped out 25-30 undergraduate courses from at least three academic faculties based on certain criteria. Among the criteria are those of relevancy, faculty and staff interest, and commitment. The interdisciplinary CLIMASP courses chosen have gone through a process of revising that aimed to embed sustainability into content and teaching methods. The CLIMASP courses are an integral part of the existing collaborating undergraduate disciplines such as education sciences, technical sciences, economics/business sciences and social sciences. The minor consists of core courses, elective courses and the required capstone course in three concentration areas: 1) Climate Change, Environment and Society; 2) Climate Change, Economics and Public Policy; and 3) Climate Change, Science and Technology. Each of the core and elective courses is equivalent of 6 ECTS and the capstone course of 10 ECTS. The capstone course is based on an internship that provides a strong mechanism for integrating academic coursework with practical experience. The amount of the minimum courses to be taken across the three concentration areas by undergraduate students to qualify for the CLIMASP minor is around 45-60 ECTS. This provides students a formal credential through transcript documentation adapting the Europass supplement diploma to certify that they have developed leadership in the field of CLIMASP.

The CLIMASP minor is framed on an interdisciplinary modular structure that enables

each partner institution to tailor CLIMASP according to its specific needs. For a smooth transition from disciplinary to interdisciplinary curricula, a piloting stage started in the spring academic semester 2014-15 on a small number of CLIMASP courses. Piloting creates the opportunity to demonstrate what interdisciplinary learning and teaching looks like throughout the semester and allows faculty, students and evaluators to observe processes, methods and practices. Based on the pilot assessment, proper interventions to enhance content and methods will be applied to all

the 240-300 CLIMASP course modules across the 10 partner universities.

***Reference;***

*Vassilios Makrakis and Nelly Kostoulas-Makrakis/ University of Crete, Greece ,2015,* ***Piloting the CLIMASP -Tempus Interdisciplinary Minor in Climate Change and Sustainability Policy: Outcomes Achieved****. The European Conference on Sustainability, Energy & the Environment 2015 Official Conference Proceedings. Pp 189-206.*