



Environmental, Disaster and Crisis Management Strategies: Interdisciplinarity and Synergy in Postgraduate Studies

Efthymis Lekkas, Emmanouil Andreadakis, Paraskevi Nomikou, Varvara Antoniou, Eleni Kapourani, and Konstantinos Paspapopoulos

Department of Geology and Geoenvironment, National and Kapodistrian University of Athens, Panepistimioupoli Zografou, 15784 Athens, Greece, (elekkas@geol.uoa.gr)

Environmental issues, disasters and crises have been showing an increasing complexity and interconnections in every level and aspect, thus requiring a holistic approach from simple problem solving to emergency management. Recent challenges include geographical and affected population escalation, complex or cascading disasters and interconnection of regional conflicts to transboundary social, political and environmental impact. One of the issues concerning the traditional management is competition or even antagonism between organizations, services and disciplines, from science to operations. In this context, a postgraduate program answering to these issues was designed in Greece, applying multidisciplinary, crossdisciplinarity and interdisciplinarity, from teaching staff and tutors, to students, objects and fields of knowledge and research. The program offers a curriculum of lessons and disciplines integrating science, humanities, legislation, institutions and operations. Geosciences carry an inherent interdisciplinarity culture and a long tradition in the research of environment and disasters, along with their familiarity with the complexity of such issues. That is why the program “Environmental, Disaster and Crisis Management Strategies” was organized by the Department of Geology and Geoenvironment of the National and Kapodistrian University of Athens, but involves social scientists, emergency operators, medical scientists etc.

The program aims at the diffusion of basic principles and tools of all related disciplines and develops a common ground and a communication language with the least barriers, and the building of trust and understanding between all parties involved. The curriculum is designed so that professionals of all disciplines and industries are able to attend without interrupting their other activities, while pursuing their personal scientific and professional educational goals and interests through selection of lessons and thesis subject. As a result, admitted students come, in a large percentage, from services and authorities involved in environmental, disaster and crisis management issues (for example fire service, police, armed forces, ministries, local administration etc) apart from graduate students continuing their studies. An added value of the program has been observed the development of a critical mass of personnel of these organizations and young scientists with increased connectivity, extending from simple acquaintance to cooperation and trust and synergy development of the services themselves. This is a promising condition for a more effective risk and emergency management in a context of ethical and responsible practices.

The curriculum comprises live or online lectures, asynchronous education with exercises and essay writing, seminars on tools such as related GIS and SPSS applications, and applied field exercises on both scientific and emergency management subjects.

The program completed the second year of function, and was upgraded after internal and external evaluation, to adjust to new fields, ideas and challenges and include students’ suggestions. More than one hundred students have graduated so far, and another 350 are currently attending. The program, which originally available in Greek, is going to be available in English starting September 2017, and is open for applications, and presented at: <http://www.edcm.edu.gr>