



Natural hazard management high education: laboratory of hydrologic and hydraulic risk management and applied geomorphology

L. Giosa (1), M.R. Margiotta (1), F. Sdao (2), A. Sole (1), R. Albano (3), G Cappa (3), C. Giammatteo (3), R. Pagliuca (3), G. Piccolo (3), D. Statuto (3), and the Applied geomorphology (A. Becci; A. Pilogallo; M. Tomasulo) Team

(1) University of Basilicata, D.I.F.A., Potenza, Italy (giosa@unibas.it), (2) University of Basilicata, D.I.S.G.G., Potenza, Italy (sdao@unibas.it), (3) Students of Laboratory of hydrologic and hydraulic risk management, Faculty of Engineering, University of Basilicata,

The Environmental Engineering Faculty of University of Basilicata have higher-level course for students in the field of natural hazard.

The curriculum provides expertise in the field of prediction, prevention and management of earthquake risk, hydrologic-hydraulic risk, and geomorphological risk.

These skills will contribute to the training of specialists, as well as having a thorough knowledge of the genesis and the phenomenology of natural risks, know how to interpret, evaluate and monitor the dynamic of environment and of territory.

In addition to basic training in the fields of mathematics and physics, the course of study provides specific lessons relating to seismic and structural dynamics of land, environmental and computational hydraulics, hydrology and applied hydrogeology. In particular in this course there are organized two connected examination arguments: Laboratory of hydrologic and hydraulic risk management and Applied geomorphology. These course foresee the development and resolution of natural hazard problems through the study of a real natural disaster.

In the last year, the work project has regarded the collapse of two decantation basins of fluorspar, extracted from some mines in Stava Valley, 19 July 1985, northern Italy. During the development of the course, data and event information has been collected, a guided tour to the places of the disaster has been organized, and finally the application of mathematical models to simulate the disaster and analysis of the results has been carried out. The student work has been presented in a public workshop.