

Anno Accademico 2017/2018

APPLIED GEOMORPHOLOGY AND GEOAMBIENTAL IMPACTS **Enrollment year** 2017/2018 Academic year 2017/2018 Regulations DM270 Academic discipline GEO/04 (PHYSICAL GEOGRAPHY AND GEOMORPHOLOGY) **Department** DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES APPLIED GEOLOGICAL SCIENCES Course PERCORSO COMUNE Curriculum Year of study 1° Period 1st semester (02/10/2017 - 19/01/2018) **ECTS** 6 **Lesson hours** 62 lesson hours Italian Language **Activity type ORAL TEST** PELLEGRINI LUISA (titolare) - 6 ECTS **Teacher Prerequisites** Knowledge of Geomorphology and Geology Learning outcomes Knowledge of relationships between man and environment and of main geomorphological hazards related to environmental planning and management. Areas analysis skill both in qualitative and quantitative terms. Interaction with other sciences skill in order to contribute to knowledge of terrain and its management. Identification on field skill of landscape elements and processes and drawing skill geomorphologic and geo-environmental maps.

Course contents

Relationships between the structural-geological environment and the landscape. Geomorphology of coastal plain, plain and plateau, dome, folded and block mountains. Tectonic geomorphology. Relationships between climatic conditions and changes and geomophological dynamics. Geomorphological hazard, vulnerability and risk in mountain, fluvial and coastal environment. Geomorphological mapping and applied

geomorphological mapping: principles and field survey techniques. Geologic and geomorphological heritage. Geosites and geo-morphosites: laws and regulations, description, assessment, surveying and mapping. Preservation and conservation of the landscape

Geologic-geomorphologic analysis of specific region to define the geoenvironmental features. Reponse of the natural system to human intervention. National and regional regulations related to V.I.A. (environmental impact assessment), and applications. Geological aspects of environmental impact studies.

Teaching methods

Lectures, laboratories and field trip

Reccomended or required readings

Allison R.J., 2002. Applied Geomorphology. John Wiley &Sons. LTD. New York

Bartolini Carlo & Peccerillo Angelo, 2002. I fattori geologici delle forme del rilievo. Pitagora Ed., Bologna

Burbank D. W. & Anderson R. S., 2011. Tectonic geomorphology. Wiley-Blackwell

D'Orefice M. e Graciotti R., 2015. Rilevamento Geomorfologico e Cartografia. Realizzazione – Lettura - Interpretazione. Dario Flaccovio Editore, Palermo

Marchetti Mauro, 2000. Geomorfologia fluviale. Pitagora Ed. Bologna Brierley G.J. & Fryirs K.I., 2005. Geomorphology and river management. Blackwell Science Ltd.

Panizza Mario, 2005. Manuale di Geomorfologia applicata. Franco Angeli Ed., Milano

Panizza Mario, 1996. Environmental Geomorphology. Elsevier.

Material provided by teacher during the course

Assessment methods

Oral exam

Further information

Oral exam

Sustainable development goals - Agenda 2030

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