



Università
per Stranieri
di Perugia

Academic Year 2012- 2013

EXAM PROGRAM

Master Degree: **International Relations and Development Cooperation (RICS)**

Subject: **Water resources management and urban planning**

Term: **II**

Professor: **Fernando Nardi**

SSD: **ICAR/02**

CFU: **6**

Global workload: **150 hours**

Distribution of workload : **40 hours of lectures and 110 hours of study at home**

Lingua di insegnamento: **English**

PREREQUIREMENT

There are no specific requirements for this course, but it is advised to have taken the "Analisi di Geostatistica applicata" lab.

COURSE OBJECTIVES

The aim of this course is to provide students the required multidisciplinary knowledge regarding the implementation of sustainable Water Resource Management (WRM) for Urban Planning (UP). More specifically students are guided to understand the different heterogeneous environmental, physical, socio-economic and political components that impact the sustainable management of water resources for efficient development of land and urban settings.

This course explains the general laws, policies and theoretical and practical principles governing water demands and consumptions for land use plans and development projects. Contents of this course deal with the links between water resources and land use planning, with introduction on practical applications of efficient integrated water resources projects for sustainable economic, social and industrial growth from the international to the community scale, for developed and developing countries, also introducing the impact of the diverse climate and hydrologic conditions.

Students are guided in developing a practical application (*Sample Project*) of integrated WRM and UP for understanding the importance of this topic in the professional world with specific regard to the urban planning and development, environmental and water risk management, renewable energies market sectors.

COURSE CONTENTS

The course is characterized by five main sections:

1. General introduction
2. History and definitions of Water Resource Management (WRM) and Urban Planning (UP)
3. Basics of the physical and socio-economic features and processes governing WRM and UP
4. Water and urban/land management under extreme conditions: floods and droughts
5. Applications of WRM and UP for developed and developing countries

The detailed syllabus will be published online on the University online platform: <http://webclass.unistrapg.it>

TEACHING METHODOLOGY

The course is mainly composed of class lectures.

In the last section of the course students are guided to develop their own *Sample Project* for applying the WRM and UP skills in a practical application, also eventually using the computer lab facility and software.

Students are advised to attend the course lectures. Nevertheless, part time (working) students are encouraged to contact the lecturer at the contact info provided here below.

TYPE OF EXAMINATION

The course exam is characterized by two sections:

- Oral test
- Presentation of the *Sample Project*

BIBLIOGRAPHY

The bibliography will be published online on the University online platform: <http://webclass.unistrapg.it>

REFERENCE BOOKS

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OTHER INFORMATION

For further info contact info are here below:

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