



Università
per Stranieri
di Perugia

Academic Year 2014 2015

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 ore**

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

Language: **English**

PREREQUIREMENT

There are no specific pre-requirements for this course, but it is advised to have taken the "Analisi di Geostatistica applicata" lab that can be selected from the ComPu degree.

The course is in English, but no prerequisite of good English skills are required. Students with basic English language knowledge are strongly encouraged to attend the course for practicing and improving the English language skills under the Lecturer's guidance.

The use of the internet and standard Office software (Microsoft Word, Excel or Open Office) at the beginner level is required. Students will be supported by the Lecturer during the projects development for learning and improving computer skills and how to general use computer software for WRM and UP applications that are commonly required in the professional and consulting world.

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 the water resources for efficient development of land and urban settings.

This course explains the general laws, policies and theoretical and practical principles on how to manage 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 applications (*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

For FULL TIME STUDENTS:

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.

For PART TIME STUDENTS

Part time (working) students are supported by specific material and presentation prepared by prof. Nardi and available at the course website <http://webclass.unistrapg.it>

The online material includes all the reference, theoretical and practical text that the part time students required for preparing the oral exam and the sample project.

TYPE OF EXAMINATION

For FULL TIME AND PART TIME STUDENTS:

The course exam is characterized by two sections:

- Oral test (three questions covering the theoretical material)
- Presentation and discussion of the *Sample Project*

BIBLIOGRAPHY

For FULL TIME AND PART TIME STUDENTS:

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

REFERENCE BOOKS

For FULL TIME AND PART TIME STUDENTS:

The reference books is published online on the University online platform: <http://webclass.unistrapg.it>

OTHER INFORMATION

For further info contact info are here below:

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