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COURSE: WATER MANAGEMENT

TEACHER: SALVATORE MANFREDA

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Language: Italian

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ECTS: 9.0

n. of hours:90

Academic year: 2014/15

Campus: Potenza

Semester: I

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TOPICS

Water resources, Statistics applied to hydrology, soil management, Retention Systems, Hydropower production.

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TEACHING METHODS (please tick one or more options)

Theoretical lessons

Tutorials in classroom

Tutorials in laboratory

Project works

Technical visits

Other activities (please specify) \_\_\_\_\_

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TEXTBOOKS

Manfreda, S., V. Iacobellis, M. Fiorentino, Appunti di Idrologia Superficiale, Aracne Editrice, pp176, 2010 (ISBN: 978-88-548-3203-9).

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ON-LINE EDUCATIONAL MATERIAL

web address: <http://www2.unibas.it/manfreda>

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LEARNING OUTCOMES

The course aims to give the project principle for water management.

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REQUIREMENTS

None

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EVALUATION METHODS (please tick one or more options)

Intermediate verifications

Written examination

Discussion of a project work

Practical test

Oral examination

Other methods (please specify) \_\_\_\_\_

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DETAILED CONTENT

Water Management and water requirements,  
Water balance,  
The water requirements in agriculture and for drinking water,  
Water availability and management,  
Statistic of high and low extremes (drought and floods);  
Derived distribution applied in engineering applications;  
Design of fluvial structures;  
Design of open channels;  
Derivation structures;  
DAMS;  
High pressure pipelines;  
Hydropower plants;  
Dissipation basins;  
Quality of water in agriculture;  
Soil drainage;  
Pumping systems;  
Irrigation systems;

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Saving water techniques in agriculture;  
Vulnerability of ground water resources.

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SEMINARS BY EXTERNAL EXPERTS    YES     NO

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FURTHER INFORMATION

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