



COURSE: Hydraulic-Hydrological Risk

ACADEMIC YEAR: 2016/17

TYPE OF EDUCATIONAL ACTIVITY: Affine

TEACHER: Andrea Cantisani

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website:

phone: 0971 205157

mobile (optional):

Language: Italian/English

ECTS: (lessons e
tutorials/practice) 6

n. of hours: (lessons e
tutorials/practice) 54

Campus: Potenza
Dept./School: School of
Engineering
Program:

Semester: II

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

The course aims to provide engineers with the knowledge and tools to understand, study and mitigate hydrological and hydraulic risk.

PRE-REQUIREMENTS

The course includes the following pre-requirements: fluid mechanics, hydrology, hydrological modeling.

SYLLABUS

The course opens with a first part dedicated to hydrology and hydraulics with a focus on the free surface flow and to hydrological and hydraulic risks. The second part deals with the use of HEC – RAS, the free software to hydraulic simulation of US Army Corps of Engineers (USACE) Hydrologic Engineering Center (HEC - CEIWR). Finally, applications and a project are provided.

TEACHING METHODS

Theoretical lessons, Classroom tutorials, Project works.

EVALUATION METHODS

Discussion of a project work.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Educational material provided by the teacher.

Textbooks:

- V. Ferro, La sistemazione dei bacini idrografici; McGraw-Hill;
- V.T. Chow, Open Channel Hydraulics, McGraw-Hill, Singapore;
- L. Giosa e A. Sole, La modellazione monodimensionale nello studio delle aree inondabili. Linee guida all'uso del modello HEC-RAS, Errecci Edizioni.

INTERACTION WITH STUDENTS

At the beginning of the course, after describing the objectives, program and evaluation methods, the teacher provides students educational materials (shared folders, etc). Simultaneously, it collects a list of students who intend to enroll with name and email.

Office hour: Wednesday 5:00 – 7:00 pm - GIS Laboratory – 5th floor - School of Engineering.

In addition to weekly reception, the teacher is available at all times for a contact with the students, through e-mail.

EXAMINATION SESSIONS (FORECAST)¹

28/06/2017, 26/07/2017, 20/09/2017, 18/10/2017, 15/11/2017, 13/12/2017

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

¹ Subject to possible changes: check the web site of the Teacher or the Department/School for updates.



Università degli Studi della Basilicata
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