

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

## **Evironmental Impact Assessment**

2122-2-F7501Q004

### Aims

The course aims at providing cultural basis and practical knowledge on Environmental Impact Assessment (EIA) \_\_\_\_

In particular:

Knowledge and understanding: students are expected to uptake the knowledge of rules and procedures to predict \_\_\_\_

Applying knowledge and understanding: the aquired skills will make the student able to prepare Environmental

Making judgements: this is an important point which will have to be aquired by the student to make possible the impact assessment and the definition of the overall environmental compatibility.

Communication skills: As for all subjects, the communication efficiay is important. in the specific domain of E

Learning skills: as the subject is in continuous evolution, a fast and efficient ability in updating is required in order to \_\_\_\_\_

### Contents

Cultural basis of Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). Laws and regulations in force. Characteristics of environmental components and factors, criteria and methods for their ante operam analysis and for the prediction of their evolution with and without the examined project or plan.

Measures for mitigation and compensation. Criteria for environmental compatibility. Weighting predicted impacts. Final balance of environmental impacts.

#### **Detailed program**

The course will include a first part defining the basic principles, methods and criteria for environmental assessment. Then, the laws in force will be analysed and explained with reference to their evolution with time and in the international framework. The subsequent lectures will develop according to the procedures set by the rules in force in Italy, dealing with all items Environmental Impact Studies and Environmental Reports for Strategic Environmental Assessment must include. First, the study outline and technical details concerning the reference to specific laws and the description of the project will be presented. Then, lectures will deal with specific environmental components and factors such as: atmosphere, water environment, geology and hydrogeology, biotic components, ecosystems, landscape, public health, noise and vibrations, radiation. For each environmental component and factor in the last lessons an open discussion will be carried out on specific case studies.

#### **Prerequisites**

Basic scientific knowledge of environmental sciences, including chemistry, physics, biology, microbiology, and, of course, ecology.

#### **Teaching form**

Frontal lessons. 8 Credits, 64 hours

#### **Textbook and teaching resource**

Didactic material can be available on the e-learning platform: http://elearning.unimib.it/course.

In addition, the following texts can be used:

•ISPRA: Elementi per l'aggiornamento delle norme tecniche in materia di valutazione ambientale

•Regione Lombardia: Linee Guida VIA (SILVIA)

•V. Torretta: Studi e procedure di valutazione impatto ambientale. Dario Flaccovio Editore, 253 pp.

•A. Zeppetella, M. Bresso, G. Gamba: Valutazione Ambientale e Processi di Decisione. NIS, La Nuova Italia Scientifica, 212 pages

#### Semester

First semester

#### **Assessment method**

The exam includes two parts:

- Written exam with OPEN QUESTIONS on the theoretical part (fundamentals, criteria and methods for assessment and evaluation of \_\_\_\_\_\_

- Oral exam consisting in a REPORT ON SUBJECTS NOT PRESENTED DURING THE LESSONS. Th exam will consist in the critical analysis of a case study, summarized in a .ppt presentation (10-15 slides, 15 \_\_\_\_\_

The work for the oral exam can be prepared individually or by two students who will discuss it together. The exam

The final grade is the average of the grades obtained in two exams, expressed in the range 18-30/30

#### **Office hours**

to be defined by e-mail to: valeria.mezzanotte@unimib.it