COURSE: ENVIRONMENTAL IMPACT ASSESSMENT			
ACADEMIC YEAR: 2019-2020			
TYPE OF EDUCATIONAL ACTIVITY: Characterizing			
TEACHER: Donatella CANIANI/Ignazio Marcello MANCINI			
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phone: 0971-205209		mobile (optional):	
Language: ITALIAN			
ECTS: 6 Lessons: 5 tutorials/practice: 1	n. of hours: 54 lessons: 45 hours tutorials/practice: 9 hours	Campus: Potenza School of Engineering Program: Environmental and Civil Engineering	Semester: second

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Learning outcomes

The course provides the teaching of knowledge for the development of environmental impact assessment procedures and techniques and methodologies to perform environmental impact studies.
Specifically, principles, theories and practical applications regarding the studies of strategic environmental assessment of plans and programs (SEA) and Environmental Impact Assessment (EIA) projects are described, explained and examined.
Students should attain the main theoretical knowledge, basic and advanced applications for the study and implementation of EIA, the legislation at community, national and regional levels, the preparation of the environmental impact study (EIS) and methodologies useful to pathway analysis.

Learning results

The student will be able to:
- understand, process, use and apply the knowledge learned and develop a complex elaboration, demonstrating to know and understand the issues covered by the course;
- analyze and evaluate the processes in an autonomous way and indicate the main methodologies relevant to the Environmental Impact Assessment;
- analyze and identify the specific aspects of the topics of Environmental Impact Assessment.

Knowledge and understanding skills

At the end of the course, the student will have acquired knowledge and methodologies to address and solve problems related to address and solve the issues related to the assessment processes and indicate the main methodologies relevant to the Environmental Impact Assessment.

Communicative Skills

The students will be able to communicate with competence and language skills, implement their communication skills in a clear and complete way, and transmit the knowledge acquired to experts and to those who do not possess a specific preparation on the subject, by using the correct technical - scientific language.

Learning Skills

The students will be able to deepen and train their knowledge through updates and the consultation of texts and publications related to the topics of the course also in order to attend advanced courses of specialization and master as well as approaching applied research activities.

PRE-REQUIREMENTS

There are not specific prerequisites

SYLLABUS

The main objects of study are related to:

- introduction to environmental impacts: definition of environment and sustainable development; indicators and indices;
- Historical background and legislation in the area of EIA;
- Scope of application and implementation of EIA.
- The EIA procedures and the legislation at community , national and regional levels;
- Strategic Environmental Assessment of plans and programs (SEA);
- Environmental impact assessment of projects (EIA) ;
- Integrated environmental authorization (AIA);
- Single Environmental Authorization (AUA).
- Impact Assessment (IAs);
- Environmental impact study (EIS): objectives, minimum contents and methods of analysis;
- The stages of EIA: screening and scoping, characterization, identification and assessment of impacts;
- Methodologies for assessing environmental impact of projects;
• Techniques for identifying impacts: checklists, graphs, matrices, overlays, GIS, monetary methodologies, multi-criteria methodologies, descriptive methodologies, analysis of alternatives.
• Characterization of environmental compartments in the water, atmospheric, soil and subsoil sectors, vegetation, flora and fauna, noise and vibration, landscape, socio-economic, public health, radiation, ecosystem.
- Analysis and examination of case studies: technical criteria and plants by the way and examination of projects.

TEACHING METHODS

• "lectures" on the topics of the course, for 45 hours;
• “classroom exercises”, for 9 hours, consist of the examination of real cases, in particular, projects, plans and programs and in the discussion and analysis of the documentation of the relative SEA and EIA procedures extracted from the sites of public bodies at which practices are instructed;
"Integrative seminars" are held by experts on specific topics.

EVALUATION METHODS

Oral examination, Discussion of a project work.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Texts of handouts and notes provided by the lecturer, are delivered directly to students via e-mail.
Specific topics are deepened on texts and documents retrieved from websites of recognized technical and scientific value.
For further information and updates, thematic texts of special interest, magazines and reports are provided.

INTERACTION WITH STUDENTS

In order to establish a direct contact between teacher and student, from the first lesson, a register of attending students is compiled, collecting data on their first name, last name, identification number, e-mail address and telephone number.
Subsequently, in proceeding of the course, the material available in electronic form is transmitted to students by mail.
In the course of lessons in the classroom a “theme of the year” is given to each student.
It is represented by the performance of a technical project examined during the course, which students will develop according to the skills acquired.
The teacher informs students about appropriate methods of study and learning assessment and methods of examination. In addition to office hours weekly, the teacher is available every time for a contact with the students, through his email or phone number to secure, if necessary, additional office hours.

EXAMINATION SESSIONS (FORECAST)[1]

24/09/2019, 17/10/2019, 14/11/2019, 12/12/2019, 16/01/2020, 13/02/2020, 12/03/2020, 16/04/2020, 14/05/2020, 18/06/2020, 23/07/2020.

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

SEMINARS BY EXTERNAL EXPERTS	YES