



| | | | |
|--------------------------------------|------------------|--|-------------|
| COURSE: Applied Ecology | | | |
| ACADEMIC YEAR: 2017-18 | | | |
| TYPE OF EDUCATIONAL ACTIVITY: Basic | | | |
| TEACHER: Daniele Mascanzoni | | | |
| e-mail: daniele.mascanzoni@unibas.it | | web: | |
| phone: 0971 205116 | | mobile (optional): 339 8922884 | |
| Language: italian | | | |
| ECTS: 6 | No. of hours: 54 | Campus: Potenza, Dept./School: SI Program: TACI | Semester: I |

TOPICS

The notion of ecosystem is widely discussed in relationship with human activities. General principles of applied ecology, energy flow and populations dynamics. Notions of dose, toxicity and biological compatibility. Global warming, evaluation of industrial activities, environmental pollution and models of sustainable growth. Energy production and environmental consequences. Alternative energy sources, nuclear power and radioecology.

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

The aim of the course is to provide an environmental focus on engineering issues, whereas the importance of a multi-disciplinary approach to environmental problems is particularly emphasized.

PRE-REQUIREMENTS

The student must have a first-level degree, with basic knowledge of physics and chemistry and a minimum of 36 ECTS in basic scientific matters (MAT/03, MAT/05, MAT/07, MAT/08, FIS/01, CHIM/07, ING-INF/05).

SYLLABUS

The course is organized into two main parts, the first one dealing with the fundamentals of Ecology, while the second one regards applications of the gained knowledge. The students can expect a better understanding of environmental issues and in particular the problems raised by to-day's industrial, infrastructural and urbanistic development.

TEACHING METHODS

Theoretical lessons

EVALUATION METHODS

Oral examination

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

W.P. Cunningham, M.A.Cunningham & B.W. Saigo. Fondamenti di Ecologia, McGraw Hill

W.P. Cunningham, M.A.Cunningham & B.W. Saigo. Ecologia Applicata, McGraw Hill

INTERACTION WITH THE STUDENTS

At the start of the course its contents and goals are presented, as well as the recommended texts and the examination procedure. The teacher is available for further information and/or discussion after the lesson hours or by appointment..

EXAMINATION SESSIONS (TENTATIVE)¹

6/2/2018, 7/2/2018, 17/4/2018, 18/4/2018, 10/7/2018, 11/7/2018, 18/9/2018, 19/9/2018, 23/10/2018, 24/10/2018

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.