Università degli Studi della Basilicata
Scuola di Ingegneria

COURSE: URBAN AND REGIONAL PLANNING			
ACADEMIC YEAR: 2018-2019			
TYPE OF EDUCATIONAL ACTIVITY: Characteristic			
TEACHER: Beniamino Murgante			
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Language: Italiano			
ECTS: 9	n. of hours: 90 54 hours of lectures 36 hours of practice	Campus: Potenza School of engineering Program: Civil and environmental engineering	Semester: I

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Knowledge and understanding:

The students have to demonstrate to know of the main principles of planning, related to spatial structure and organization.

Ability to apply knowledge and understanding:

The students have to demonstrate that they are able to analyse the main characteristics of a territorial area using GIS technologies, highlighting the critical issues.

Autonomy of judgment:

The students have to be able to independently identify integrated and intersectoral actions for the solution of problems and the achievement of sustainable development of the territory.

Communicative Skills:

Communication aspects are central to the adoption of urban planning instruments. It is fundamental to synthetize al maps, reports and norms in a clear way.

The students have to demonstrate the ability to easily illustrate to not experts (In many cases the administrators and the stakeholders are not experts) without simplifying or trivializing, continuing to use a technical language, the project work. The course adopts a lot of IT technologies; consequently, the use of multimedia tools is encouraged.

Learning ability:

One of the aim of the course is to develop in students a critical approach to planning process. During the lessons and seminars, discussions are stimulated and the students are encouraged to express their opinions about plans or projects. Students are to stimulated to search for video-lessons, theses and articles in order to allow them to increase their knowledge for supporting the project work.

PRE-REQUIREMENTS

The course does not require any specific prerequisites

SYLLABUS

Illustration of the main typologies of the plan with related legislative references.

Foundations of geographic information systems.

Elements and methodologies of analysis of socio-economic and environmental variables.

Analysis of the physical and socio-economic planning tools.

The following topics will be discussed in detail:
Introduction to the course, why we plan, city and territory.
Several best practice in planning.
The main Italian Nation Law in planning n. 1150\1942.
Principles of Regional Planning.
The Masterplan.
Principles of urban design.
Urban standards.
The transfer of development rights.
Principles of Strategic planning.
Principles of Landscape planning.
Environmental impact assessment and strategic environmental assessment
Land Suitability analysis
Land Uptake
Introduction to geographic information systems.
Analysis with geographic information systems.
3D Models.
Analysis on grid data.

TEACHING METHODS

The course includes 90 hours of lectures. More particularly 54 hours of lectures on the theoretical aspects, and 36 hours of training on geographic information systems and applications Land Suitability analysis will take place.
At the end of the training part the students will be divided into groups (up to four students) in order to realize the project work evaluated during the final exams. The course also contains several seminars on good planning practices. Students will have free access to the lab for further individual tutorials.

EVALUATION METHODS

The objective of the exam is to check the level of achievement of the training objectives previously indicated. The exam consists on verifying the concepts illustrated during the lectures and a discussion about the project work. The duration of the exam is approximately thirty minutes.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Edoardo Salzano, Fondamenti di urbanistica, Editori Laterza
Roberto Camagni, Principi di economia urbana e regionale, La Nuova Itala Scientifica
Ian McHarg, Design With Nature, Wiley, John & Sons, Incorporated
Frederick R. Steiner, The Living Landscape : An Ecological Approach to Landscape Planning, McGraw-Hill
Beniamino Murgante, L'informazione geografica a supporto della pianificazione territoriale, FrancoAngeli
Piergiuseppe Pontrandolfi, Antonello Azzato, (2012) Innovazioni nella pianificazione territoriale e urbanistica. Libria
Pileri P., (2015) Che cosa c'è sotto. Il suolo, i suoi segreti, le ragioni per difenderlo, Altreeconomia
Murgante B., Borruso G., Lapucci A. (2011) “Geocomputation, Sustainability and Environmental Planning” Studies in Computational Intelligence, Vol. 348. Springer-Verlag, Berlin. ISBN: 978-3-642-19732-1.
Murgante B., Borruso G., Lapucci A. (2009) “Geocomputation and Urban Planning” Studies in Computational Intelligence , Vol. 176. Springer-Verlag, Berlin. ISBN: 978-3-540-89929-7. doi:10.1007/978-3-540-89930-3
orruso G., Bertazzon S., Favretto A. Murgante B., Torre C. (2012) “Geographic Information Analysis for Sustainable Development and Economic Planning: New Technologies” Information Science Reference IGI Global, Hershey, PA DOI: 10.4018/978-1-4666-1924-1
The main educational resources are shared in a Dropbox folder.
Further educational resources (video, audio, ecc.) are available on the course blog:
http://pianificazioneterritoriale.wordpress.com/

INTERACTION WITH STUDENTS

The professor, after explaining the course program, the training objectives and the verification methods, provides to the students the teaching material in electronic form via the blog or through dropbox, google drive etc.
At the same time, the list of students, including their name, surname, email and mobile number is collected.
The professor is available for further explanations every Tuesday (17:00 - 20:00) at his own room (Potenza, Campus di Macchia Romana, School of Engineering, IV floor, room 23 professor is also available at any time for a contacts with students, through their own email and mobile phone.

EXAMINATION SESSIONS (FORECAST)[1]

6 February 2108, 27 February 2018, 10 April 2018, 12 June 2018, 10 July 2018, 24 July 2018, 11 September 2018, 11 October 2018, 13 November 2018, 11 December 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.