

**Master di II livello in Informazione Geografica e Supporto alla Pianificazione territoriale e ambientale (Geographic Information and Environmental Planning Support) e (titolo duale) US Master of Science Degree in Geography and Cartography (Master in Geografia e Cartografia).**

**University of Cagliari, Italy  
Academic Year 2011-12**

**Description of educational activities**

**Valutazione e pianificazione ambientale  
(Environmental Assessment and Planning)  
Syllabus – University of Cagliari, Italy**

**Course information**

Course number: to be attributed

Course title: Valutazione e pianificazione ambientale (Environmental Assessment and Planning).

Term: First semester (Oct-Dec)

Class meetings: to be attributed

Web page: [www.unica.it](http://www.unica.it) and Unica-Atlantis website in progress

**Professor contact Information**

Professor: Corrado Zoppi (Associate Professor)

e-mail: [zoppi@unica.it](mailto:zoppi@unica.it)

Office: Dipartimento di Ingegneria del Territorio, Sezione Urbanistica, Via Marengo 2, Cagliari.

Office hours: Monday 12.00-13.30 or by appointment

Office phone: +39 070 6755216

Home page: <http://people.unica.it/adm/>

**Course Description**

The professional education of environmental specialist engineers may allow them to be able to project general and sectoral regional and city plans and their implementation plans, programs and projects (city masterplans and their implementation projects; urban and regional waste disposal plans; plans of protected areas; urban renewal and environmental restoration plans). In this course, a peculiar attention is devoted to strategic environmental assessment of city and regional plans. The course program includes take home assignments, and mid-term and final exams. Performance of the students is evaluated according to the grading policy reported below.

**Required Textbook.**

No specifically required textbook. Readings and presentations distributed via course website and e-mail.

**Grading policy**

The final grade is attributed according to a weighted summation of the student performance assessed through the following four criteria, as described in the following list.

Assignments .....	10%
Class participation .....	10%
Mid-Term Exam .....	30%
Final Exam .....	50%

**Course Program**

Section 1 – Introduction.

Section 2 - Strategic environmental assessment (SEA): European legislation and approaches.

Section 3 – Definition of a SEA environmental report applied to a regional or city plan, first phase: context and SWOT analysis; definition of the plan objectives.

Mid-Term Exam

Section 4 - Definition of a SEA environmental report applied to a regional or city plan, second phase: definition of alternative planning options; discussion of the question of indicators; qualitative and quantitative assessment.

Section 5 - Definition of a SEA environmental report applied to a regional or city plan, third phase: decision making: which alternative is the best?

## Final Exam

### Grading conversion

Marks are expressed at UniCA in grade points according to the Italian system and correspond to marks expressed in letters according to the USA and UK systems, as detailed below.

Marks in grade points (Italian System)	Marks in letters (USA and UK system)
30/30 cum laude	A+
From 29/30 to 30/30	A
28/30	B+
27/30	B
From 24/30 to 26/30	C
From 18/30 to 23/30	D
Less than 18/30	F

### Attendance

Class attendance is mandatory.

### Late assignments

Assignments should be submitted by the due date. Late assignments are accepted up to a 4 days delay with a penalty equal to 10% of the attributed weight.

**Metodi e strumenti della pianificazione territoriale e ambientale  
(Spatial and environmental planning methods and tools)  
Syllabus – University of Cagliari, Italy**

**Course information**

Course number: to be attributed

Course title: Metodi e strumenti della pianificazione territoriale e ambientale (Spatial and environmental planning methods and tools).

Term: First semester (Oct-Dec)

Class meetings: to be attributed

Web page: [www.unica.it](http://www.unica.it) and Unica-Atlantis website in progress

**Professor contact Information**

Professor: Andrea De Montis (Associate Professor)

e-mail: [demontis.andrea@gmail.com](mailto:demontis.andrea@gmail.com)

Office: Aula “Clemente”, Dipartimento di Ingegneria del Territorio, Sezione Urbanistica, via Marengo 2, Cagliari.

Office hours: Tuesday and Thursday 11-13 (during class semester); by appointment (in other terms)

Office phone: +39 070 6755210

Home page: <http://people.unica.it/adm/>

**Course Description**

This course presents methodological and operational issues regarding spatial and environmental planning. In this course, students are confronted with a variety of methods and approaches that aid analysts and professionals in contemporary planning practice. Theoretical materials are further explained with the presentation of case studies drawn mainly, but not exclusively, from Italian national and local experiences. The course program comprehends take home assignments, Mid-Term and Final written exams. Students' overall attainment is evaluated according to the criteria weighted as reported below.

**Required Textbook.**

No specifically required textbook. Readings and presentations distributed via course website.

**Grading policy**

The final grade is attributed according to a weighted summation of the student performance assessed through four criteria, as described in the following list.

Assignments ..... 20%

Class participation ..... 20%

Mid-Term Exam ..... 30%

Final Exam ..... 30%

**Course Program**

Section 1 - Introduction

Section 2 - Spatial and Environmental Planning (SEP): rationale and approaches

Section 3 - SEP: operational analysis and tools

Mid-Term Exam

Section 4 - SEP in Italy/Europe: theory

Section 5 - SEP in Italy/Europe: practical examples

Final Exam

Note, descriptions are subject to change at the discretion of the professor.

**Grading conversion**

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30/30 cum laude	A+
From 29/30 to 30/30	A
28/30	B+
27/30	B
From 24/30 to 26/30	C
From 18/30 to 23/30	D
Less than 18/30	F

**Attendance**

Attendance is expected and required.

**Late assignments**

Assignments should be submitted by the due date. Late assignments are accepted up to 4 days late with a penalty equal to 1% of the weight attributed to Assignments.

**Metodi e strumenti della pianificazione territoriale e ambientale  
(Spatial and environmental planning methods and tools)  
Syllabus – University of Cagliari, Italy**

**Course information**

Course number: to be attributed

Course title: Sistemi di Supporto alla Pianificazione urbana e territoriale (Planning Support Systems).

Term: First semester (Oct-Dec)

Class meetings: to be attributed

Web page: [www.unica.it](http://www.unica.it) and Unica-Atlantis website in progress

**Professor contact Information**

Professor: Michele Campagna, PhD (Adjunct professor of Spatial Planning)

e-mail: [campagna@unica.it](mailto:campagna@unica.it)

Office: Dipartimento di Ingegneria del Territorio, Sezione Urbanistica, via Marengo 2, Cagliari.

Office hours: Tuesday and Thursday 11-13 (tbc) or by appointment.

Office phone: +39 070 6755206

Home page: <http://people.unica.it/campagna>

**Course Description**

The course presents theory, methods and tools for the construction of integrated (geographic) information systems (coupling GIS, models, geo-visualization, and other methods and tools) supporting spatial planning and design, or Planning Support Systems (PSS). In this course, students are exposed to a conceptual framework defining PSS with regards to different spatial planning paradigms (rational, participatory, collaborative, ..). The students will be guided to the practice of existing tools and their evaluation, and they will learn fundamentals of PSS design which will be applied to selected case studies. The course aims at supplying framework knowledge and practical skills for substantiating planning and design with scientific geographical knowledge in the light of the contextual decision-making process settings, according to an approach also known as GeoDesign.

The course program comprehends take home assignments, studio work and Final written exams. Students' overall attainment is evaluated according to the criteria weighted as reported below.

**Required Textbook** (*copies available at the campus library*).

Brail R and Klosterman R (Eds), 2001, Planning Support Systems: Integrating Geographic Information Systems, Models, and Visualization Tools, Redlands, CA: ESRI Press

Campagna M (ed), 2006, GIS for Sustainable development, Taylor and Francis, Boca Raton;

Campagna M, 2004, Tecnologie dell'Informazione Spaziale per il governo dei processi insediativi, Franco Angeli Editore, Milano;

Geertman S, Stillwell J (Eds) 2009, Planning Support Systems: best practices and new methods, Springer

Other selected readings and materials listed in the course website.

**Grading policy**

The final grade is attributed according to a weighted summation of the student performance assessed through four criteria, as described in the following list.

Assignments ..... 20%

Class participation ..... 20%

Studio work ..... 30%

Final Exam ..... 30%

## Course Program

Section 1 - Introduction

Section 2 – GeoDesign: theory, methods and applications

Section 3 - Planning Support Systems: principles and applications

Section 4 – PSS design framework

Section 5 – PSS design studio

Final Exam

Note, descriptions are subject to change at the discretion of the professor.

## Grading conversion

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28/30	B+
27/30	B
From 24/30 to 26/30	C
From 18/30 to 23/30	D
Less than 18/30	F

## Attendance

Attendance is expected and required.

## Late assignments

Assignments should be submitted by the due date. Late assignments are accepted up to 4 days late with a penalty equal to 1% of the weight attributed to Assignments.

## **Tirocinio (Internship)**

### **Description**

During the Internship, students will be exposed to practical questions connected to GIS management and GIS based analysis and to regional and master planning professional practice. Each student will be tutored by an instructor and encouraged to compare theoretical issues developed during the classes with pragmatic and operational issues that characterize professional activities.

The University of Cagliari, Dipartimento di Ingegneria del Territorio, is linked to a series of public and private agencies, which are ready to host and guide students in this respect: Servizio informativo e cartografico regionale, Direzione generale della pianificazione urbanistica territoriale e della vigilanza edilizia, Regione Autonoma della Sardegna (Regional Section for geographic information and cartography, General Direction of urban and environmental planning and building control), CRS4 (Research Center of Sardinia), Nucleo di Valutazione e Verifica degli Investimenti Pubblici, Regione Autonoma della Sardegna (Public Investment Evaluation and Assessment Agency, Autonomous Region of Sardinia), Ufficio del Piano, Provincia del Medio Campidano (Planning Agency, Province of Medio Campidano).



**Tesi.  
(Thesis)**

**Description**

Students are required to write a final thesis to experiment their ability to develop independent research work under the tutorship of an instructor. Possible arguments of the Thesis are discussed with the tutor assigned and can refer to critical theoretical issues taught during the classes or to practical-professional questions dealt with during the Internship. In the latter case, officials of the Internship agency may be involved in mentoring.

**Lingua italiana.  
(Italian language)**

**Description**

This extra-curriculum course provides international students enrolled in courses at the University of Cagliari with skills in the Italian language with an emphasis for cultural and geographical aspects.

**Lingua inglese.  
(English language)**

**Description**

This extra-curriculum course provides, when required, non English speaking students with skills in understanding, writing, and speaking the English language needed to attend classes at GMU and BBK-UL.