UNIVERSITA' DEGLI STUDI MEDITERRANEA DI REGGIO CALABRIA

Subject Code	**16585 (moduli: 16586-16587)**
Subject Name	**Laboratory of Representation**
Professor	**Lonetti Giuseppe**
Department:	**PAU –Patrimonio,Architettura,Urbanistica**
Degree course:	**Science of Architecture**
Class:	**L 17**
Type of educational activity:	**basic**
Disciplinary Area:	**Representation of Architecture and Environment**
Scientific-Disciplinary Sector:	**ICAR 17**
Compulsory preliminary exams:	**no**
Course Year:	**first**
Semester:	**first and second**
ECTS:	**10**
Hours:	**100**

Synthetic description:

In the Laboratory, drawing is intended as a tool for sharpening the perception-representation of reality in order to prepare to see-looking forms and proportions, then as critical analysis, study-reading to understand the definition of constructive and structural-functional the joint distribution, detection logical-formal and technical representation of an architectural work. For the purposes of learning are planned lectures, practical exercises in the classroom and the real test for the most appropriate graphic techniques.

Acquisition of knowledge on:
Students will acquire the theoretical foundations of Representation's Science and its application aimed at the understanding of the representation methods and techniques on which drawing rests the foundation of his training to facilitate instrumental recruitment of technical and architectural drawing in their scalar contents and size. Such knowledge nearing direct to knowledge of the artifacts at different scales through direct detection or instrumental on which to refine new technological and computerized guidelines.

Evaluation method:
It is expected that a final examination generally consists of an interview to verify the student's ability to apply the theoretical concepts introduced during the course and its ability to apply graphics.This examination takes into account the mid-term tests, as of the end of the lecture series in the 1st half, which generally consist of a written examination / test in which the student becomes aware of its levels of learning.
The talk-examination consist in an assessment of merit also of the technical graphics production the two modules Laboratory.

Student's independent work

Training activity aimed at studying of the Representation Science, of drawing and the representation, of the architectural documentation methods. Tutorials and graphics applications, theoretical concepts.

Detailed course program

Form of Applications of Descriptive Geometry and Drawing

The learning module is divided into two stages of formation. The first one addresses the fundamental issues of Descriptive Geometry to provide the theoretical basis necessary for the understanding of space and its representation on the plane. The second one is based on direct applications to the reality-architectural environment with particular reference to the components historicised wherein the geometric representation is used as a tool to verify dimensional and spatial forms of architecture, city, territory.

1. Presentation of the contents of the program and its articulation
2. Tools and techniques for the representation
3. The representation of objects
4. Elements of projective geometry
5. The orthogonal projections, the isometric, the perspective
6. The theory of shadows
7. The surfaces in architecture
8. Forms and proportions
9. The architectural drawing, the city, the area, the landscape
10. Exercises and applications

Form of Architectural Survey

The teaching module is aimed at the direct contact with reality monumental and urban areas, of architectural artifacts, at building, to develop a culture of criticism of the study of building elements and use of materials, and to refine, with implications for environmental, the recognition of the laws of evolution of the urban fabric and the body-city.

1. Presentation of the contents of the program and its articulation
2. The architectural survey

Methodologies and tools: basic notions and tools for architectural survey and instruments for the measure; eidotipi, architectural documentation to sight ; methods of return of the architectural surveys.;units.

3. Planimetric survey and measurements
   Trilaterations and orthogonal coordinates
4. Architectural survey of elevation and sections
5. Architectural survey of constructive and formal details:
   -walls
   -times and attics
   -stairs and roofs
   -openings
   -moldings and shapes
6. Digital representation for architectural survey
7. The historical-critical survey
8. A case study

Resources and main references

The references will be specified in the first lessons in the real needs of students of which will be verified the origin and will be available on the website of the University or Department.

Reference texts are:

U. SACCARDI, Applicazioni di Geometria Descrittiva,Editrice Fiorentina, Firenze 1977

G. CATALDI, Sistemi statici in architettura, Edizioni Cedam , Modena 1985.

C. BONFIGLI – C. R. BRAGGIO , Geometria descrittiva e Prospettiva,Hoepli, Milano 1987

R. CHITHAM, Gli Ordini Classici in architettura, Hoepli, Milano 1987.

M. BINI,Tecniche grafiche e rappresentazione degli elementi dell'Architettura,Alinea, Firenze, 1988

R. BOLLATI,S. BOLLATI,G. LONETTI, L'Organismo architettonico,Alinea,Firenze,1991

M. DOCCI, Manuale di disegno architettonico, Laterza, Bari, 1992.

M. DOCCI, R. MIGLIARI, Scienza della rappresentazione. Fondamenti e applicazioni di geometria descrittiva, Roma, NIS, 1992

A. SGROSSO, La rappresentazione geometrica dell'architettura. Applicazioni di geometria descrittiva, Torino, Utet, 1997

M.DOCCI , D.MAESTRI , Scienza del Disegno, Utet, Torino 2000

MIGLIARI R., Fondamenti della rappresentazione geometrica e informatica dell'Architettura, Edizioni Kappa, Roma 2000

R. MIGLIARI, Geometria dei modelli, Edizioni Kappa, Roma, 2003 G. CENTO, Il rilievo edilizio architettonico, Vitali e Ghianda, Genova 1959

A. PALLADIO, I Quattro Libri dell'Architettura, 1570, ripr. in fac-simile, Hoepli, Milano 1980.

R. CHITHAM, Gli Ordini Classici in architettura, Hoepli, Milano 1987.

M. DOCCI, D. MAESTRI, Manuale di rilevamento architettonico e urbano, Laterza, Bari, 1994.

M. BINI , Tecniche grafiche e rappresentazione degli elementi dell'Architettura, Alinea, Firenze, 2001

R. CANNAROZZO, L. CUCCHIARINI, W. MESCHIERI, Misure Rilievo Progetto. Vol.2: Procedure di rappresentazione del territorio, Zanichelli Editore Spa, Bologna 2007

C. CUNDARI, Il Rilievo architettonico. Ragioni, fondamenti, applicazioni, edizioni Kappa, Roma 2012

G. CENTO, Il rilievo edilizio architettonico, Vitali e Ghianda, Genova 1959

A. PALLADIO, I Quattro Libri dell'Architettura, 1570, ripr. in fac-simile, Hoepli, Milano 1980.

R. CHITHAM, Gli Ordini Classici in architettura, Hoepli, Milano 1987.

M. DOCCI, D. MAESTRI, Manuale di rilevamento architettonico e urbano, Laterza, Bari, 1994.

M. BINI , Tecniche grafiche e rappresentazione degli elementi dell'Architettura,Alinea, Firenze, 2001

R. CANNAROZZO, L. CUCCHIARINI, W. MESCHIERI, Misure Rilievo Progetto. Vol.2: Procedure di rappresentazione del territorio, Zanichelli Editore Spa, Bologna 2007

C.CUNDARI,Il Rilievo architettonico. Ragioni,fondamenti,applicazioni,edizioni Kppa,Roma 2012