Degree course	**Architectural Sciences – Undergraduate**
Course code	**/**
Lecturer	**Mariangela MUSOLINO**
Course name	**Urban Appraisal**
Disciplinary area	**Civil Engineering and Architecture – CEAr**
Disciplinary field of science	**ICAR 22 - CEAr 22**
University credits - ECTS	**8**
Teaching hours	**80**
Course year	**II**
Semester	**II**

Synthetic description

Appraisal Course \ Class is a final step toward sound and thorough education and training of Architect, through a comparison between Buildings and construction costs as well as selling prices. Students should gain awareness and understanding that urban and architectural design faces complex economic relationships. The latter shape construction sector as well as real estate market. Consequently, Architects must get economic and appraisal grasps, as well as theoretical and methodological frame work necessary to solve feasibility problems so important in today professional activities in construction sector and real estate market.
Course \ Class includes: - Lectures; - Case Study presentations; - Problem sets, finalized to “best practices” learning; - possibly periodical tests to check and measure learning progress.

Course entry requirements

To improve learning process, students should get preliminary basic information regarding: basic microeconomics theory and mathematics for finance. Students must be skilled in: construction materials; construction technology .

Course programme

A. BASIC MICROECONOMIC CONCEPTS
01. Demand curve: utility theory; consumer behavior and equilibrium. 02. Supply curve: production theory; production costs; producer behaviour and equilibrium. 03. Market theory: supply and demand accomplish equilibrium; competition; monopoly; oligopoly.
B. APPRAISAL THEORY
01. Appraisal central principles. 02. Value theory, economic aspects of value, appraisal approaches: market value; cost value; development value; complement value; replacement value.
03. Appraisal methodological foundation. 04. Method of comparison in Appraisal. 05. Appraisal tools: comparative versus mathematical approach; Sales Market versus Income approach. 06. Financial Mathematics.
C. APPRAISAL METHODOLOGY
01. Real Estate Market valuation: structure and data sources; market value forecast approaches: sales; cost; Market Comparison Approach (MCA); income capitalization; cash flow analysis.
02. Construction sector: structure and data sources; construction cost appraisal: comparative versus detailed approaches; mixed appraisal techniques; cost estimate sheet; Global Cost theory and appraisal; building life cycle cost estimate.
D. APPROACHES AND TECHNIQUES FOR PLAN AND PROJECT VALUATION
01. Taxonomy and classification of valuation methods and approaches. 02. Private and public profitability. Private cost-revenues versus public economic cost-benefits. 03. Multi Criteria Analysis. 04. *Highest and Best Use Analysis*.

ADDITIONAL INFORMATION

Additional information will be provided through seminars focused on benchmarks concerning valuation of projects and plans. Students are requested to develop applications and experimentations concerning economic valuation of specific plans and project. Outcomes will be presented in Class.

Expected results

Expected results of Appraisal Course are: .

- knowledge of fundamental concepts and theory in microeconomics, as basis to understand Civil Appraisal theory and methodology;
- gaining of professional skills and ability to appraise: buildings construction cost and market selling prices; physical maintenance and energy management costs; Global Cost in building life-cycle; global project feasibility.

Course structure and teaching

CLASS-ROOM*: 80 hours of which* PRACTICAL ACTIVITIES: *16 hours*
HOMEWORK:120 *hours*
PRACTICAL ACTIVITIES ENABLE STUDENTS TO PUT INTO PRACTICE THE THEORY AND THE METHODOLOGY

Student's independent work

Students should read topics before class. After class students should devote two hours to learn appraisal theory and methodology . This allows students to better ask questions to professor during the sub-sequent class. Reading before class and studying after class will ease previous etical.

Testing and exams

Learned knowledge is evaluated and graded through written tests and oral Final Exam, regarding both theoretical and operational issues.
During Final Exam, specific requirements for satisfactory completion include the following: - knowledge learned by Student; - its facilitated discussion; - skill and ability to implement learned knowledge.

Suggested reading materials

1. Forte C., De Rossi B. (1979) Principi di Economia ed Estimo, Etaslibri, Milano.
2. Tecnoborsa (2005) Codice delle valutazioni immobiliari. Italian Property Valuation Standard. Telligraf S.r.l. Roma.
3. Grillenzoni M., Grittani G. (1994) Estimo: teoria, procedure di valutazione e casi applicativi. Calderini. Bologna.
4. Musolino M. (1994) "Principi di stima dei costi negli interventi di recupero". Quaderni del Dipartimento Patrimonio Architettonico e Urbanistico. Università degli Studi di Reggio Calabria, n. 8. Inserto: pp. 1-48.
5. Mollica E., Musolino M. (2000) "Metodi e strumenti di valutazione applicati alla conservazione ambientale e culturale". Pagine di Estimo. Quaderni del Dipartimento Patrimonio Architettonico e Urbanistico. Università degli Studi di Reggio Calabria, nn.16-18. Inserto, pp. 1-36.

Further references and readers will be provided by instructor.