



Corso di Laurea Magistrale “Architettura” (LM-4 cod. B076)

Curriculum ARCHITECTURAL DESIGN (C61)

PROJECT ECONOMIC EVALUATION (B018885) 6 CFU (48 hours)

Teacher: Marta Berni

Course content

The course aims to introduce students to the theoretical and methodological foundations of scientific evaluation which are necessary for the architect as the coordinator of the decision-making process of the architectural project and urban plan. The course also aims to provide some basic critical knowledge on the operation and use of the most common evaluation techniques in the field of architectural design and urban planning.

Training objectives

The course aims to provide the student with the basic logic of the evaluation process, forming a technician equipped with the theoretical knowledge and the technical skills required to understand, control and design an evaluation process supporting the decision-making process of complex projects and urban plans according to European, national and regional regulation.

Learning Objectives

The course aims to equip the student with:

- theoretical and methodological knowledge on evaluation as a cognitive process for the expression of judgements of value on the available alternatives according to scientific procedures;
- technical and operational skills needed to carry out economic evaluations suited to the different stages of the architectural project and urban plan.

In particular, the course provides:

- the basic concepts of evaluation as a scientific discipline;
- the characteristics of the decision-making process of the architectural project and urban plan;
- the main, most common, economic evaluation techniques typically used in evaluating the project at different stages and different scales (from the building to the city).

Main topics of the course

- 1) Introduction to the evaluation as a scientific discipline;
- 2) Relationship between the decision-making process and evaluation;
- 3) Uncertainty and forecasting in the decision-making process of architectural and urban project;
- 4) The project as decision-making tool;
- 5) The Evaluation of complex project
- 6) Main evaluation techniques (with a special focus on their pros and cons):
 - a) SWOT Analysis;



- b) The logical framework approach evaluating the project's relevance, internal coherence, and sustainability;
- c) Financial analysis to evaluate the project's private efficiency;
- d) Cost-benefit analysis to evaluate the project's public efficiency;
- e) Democratic evaluation and multi-criteria analysis.

Teaching methods

The course consists of lectures which develop course issues including the principle of evaluation theory, the use of evaluation in the architectural project's (and urban plan's) decision-making process and the presentation of the main, most common evaluation techniques used in the architect's professional practice.

Mode of learning verification

Exams are oral.

Students regularly attending the course have two possibilities:

- 1) an oral exam on all the topics addressed in the course (the PowerPoint presentations of all the lectures are provided in digital form by the teacher);
- 2) students interested in deepening a specific topic can make a written report (theme and structure must be agreed in advance with the teacher) and present it orally, demonstrating sufficient knowledge of course contents.

Students not attending the course must agree on a bibliography (tailored according to their specific interests in evaluation) with the teacher and take an oral examination on it.

Recommended bibliography

On Decision-making & Rationality:

- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3), 488-500.
- Armsh, H. (2010, April). Decision making. In *Proceedings of the 12th International Business Research Conference*, Melbourne, Australia (pp. 11-21).
- Baron, J. (2004). Normative Models of Judgment and Decision Making. In D. J. Koehler & N. Harvey (Eds.), *Blackwell Handbook of Judgment and Decision Making*, pp. (Pre-publication version pp. 19-36).
- Bennet Bennet, A., & Bennet, D. (2008). The Decision-Making Process for Complex Situations in a Complex Environment, First chapter in Burstein, F. and Holsapple, CW (Eds), *Handbook on Decision Support Systems*.
- Jones, B. D. (1999). Bounded rationality. *Annual review of political science*, 2(1), 297-321.
- Leoveanu, A. C. (2013). Rationalist model in public decision making. *Journal of Public Administration, Finance and Law*,(4), 43-54.

On Uncertainty:

- Abbott, J. (2005). Understanding and managing the unknown: The nature of uncertainty in planning. *Journal of Planning Education and Research*, 24(3), 237-251.
- Dequech, D. (2011). Uncertainty: a typology and refinements of existing concepts. *Journal of economic issues*, 45(3), 621-640. [



Walker, W. E., Harremoës, P., Rotmans, J., van der Sluijs, J. P., van Asselt, M. B., Janssen, P., & Kraymer von Krauss, M. P. (2003). Defining uncertainty: a conceptual basis for uncertainty management in model-based decision support. *Integrated assessment*, 4(1), 5-17.

On Evaluation:

Bentivegna, V. (2015) About Design, Evaluations And Evaluators. *Valori e Valutazioni*, 15, 1-12.

European Commission, Budgets D. G. (2004). *Evaluating EU Activities - a Practical Guide for the Commission Services*.

European Commission, Development D.G. (2006) *Indicative Guidelines on Evaluation Methods: Monitoring and Evaluation Indicators*

Giorgi, L., & Tandon, A. (2000). *The Theory and Practice of Evaluation ICCR (Interdisciplinary Centre for Comparative Research in the Social Sciences) Working Papers*.

Hanberger, A. (2011). The real functions of evaluation and response systems. *Evaluation*, 17(4), 327-349.

Scriven, M. (2007). The logic of evaluation. In H.V. Hansen, et. al. (Eds), *Dissensus and the Search for Common Ground*, CD-ROM (pp. 1-16). Windsor, ON: OSSA.

Stufflebeam, D. L. (2001) *Evaluation Models, New Directions For Evaluation*, no. 89, Spring Jossey-Bass, San Francisco, 7-98

Stufflebeam, D. L., & Shinkfield, A. J. (2007). *Evaluation theory, models, and applications*. Shinkfield. San Francisco, CA: Jossey-Bass

Tarsilla, M. (2009). Theorists' Theories of Evaluation: A Conversation with Jennifer Greene. *Journal of MultiDisciplinary Evaluation*, 6(13), 209-219.

On SWOT analysis:

Chang, H. H., & Huang, W. C. (2006). Application of a quantification SWOT analytical method. *Mathematical and computer modelling*, 43(1), 158-169.

On the Logical framework approach & Project Cycle Management:

European Commission, Development D.G. (2004) *Project Cycle Management*

Norad (1999) *Logical Framework Approach: handbook for objectives-oriented planning*

On the Evaluation of public and private efficiency:

Belli, P., Anderson, J., Barnum, H., Dixon, J., & Tan, J. P. (1998). *Handbook on economic analysis of investment operations*. The World Bank, Washington, DC.

Benhamou, F. (2003). Heritage. In Towse, R. (ed). *A Handbook of Cultural Economics*. Cheltenham: Edward Elgar Publishing, 2003, (No. HCE; 32), p. 255-262.

Howe K. & Ashcraft, C. (2005). Deliberative democratic evaluation: Successes and limitations of an evaluation of school choice. *Teachers College Record*, 107(10), 2274-2297.

Mason, R. (2002). Assessing values in conservation planning: methodological issues and choices. *Assessing the values of cultural heritage*, 5-30.

Milis, K., Snoeck, M., & Haesen, R. (2009). Evaluation of the applicability of investment appraisal techniques for assessing the business value of IS services.

Mourato, S., & Mazzanti, M. (2002). Economic valuation of cultural heritage: evidence and prospects. *Assessing the values of cultural heritage*, 51-76.



On the Evaluation of Architectural Heritage:

Pagiola, S. (1996). Economic analysis of investments in cultural heritage: Insights from environmental economics. World Bank, Washington, DC.

Throsby, D. (2002) Cultural Capital and Sustainability Concepts in the Economics of Cultural Heritage. Assessing the values of cultural heritage, 101-117.

On the Democratic Evaluation and Multi-Criteria Analysis:

Berni, M. (2015) Democratic evaluation of architectural heritage. Heritage and technology - mind knowledge Experience Le vie dei mercanti - XIII Forum internazionale di studi, 1765-1774.

Berni, M. (2015). Democratic Evaluation of Architectural Heritage Restoration and Conservation Projects. FABBRICA DELLA CONOSCENZA, Contemporary problems of architecture and construction – Proceedings of 7th International conference, 669-672

Floc'hlay B., Plottu E. (1998). Democratic evaluation from empowerment evaluation to public decision-making, Evaluation, n. 4.3, pp. 261-277.

Hanberger A. (2006). Evaluation of and for Democracy. Evaluation, n. 12(1), pp. 17-37.

Plottu B., Plottu E. (2009). Approaches to Participation in Evaluation Some Conditions for Implementation. Evaluation, n. 15(3), pp.343-359.

UK Government (2009). Multi-criteria analysis: a manual. Department for Communities and Local Government.