Corso di Studio	Architettura Classe LM4
Codice insegnamento	Materia a scelta
Docente	Francesco Bagnato
Insegnamento	Design of building systems
Ambito disciplinare	B
Settore Scientifico Disciplinare	8c/1 - ICAR 12
Numero di CFU	6
Ore di insegnamento	60
Anno di Corso	
Semestre	secondo

Brief description of teaching and learning objectives

The course "Accessibility, usability and security of spaces" was activated for the first time in the academic year 2003/2004, at the Faculty of Architecture of Reggio Calabria.
The aim of the course is to promote and develop the culture of accessibility, understood as the possibility of overcoming architectural, environmental, urban and management obstacles, through the application of the principles of Universal Design, ie a responsible design for a easy and safe use of spaces and equipment by an extended user.
The course in particular tends to make students understand the importance of the social role and responsibility of the architect. Demonstrate, that is, a greater sensitivity to the problems of accessibility, usability and security for all citizens, recipients of their work, considering the space built in the "universal" sense from the act of design.Sia in the case of open spaces that buildings, whether it is public interventions or for a private client, the attention to define conditions of autonomy in fruition is now an essential datum seizing the solicitations of "sustainability" as imperative dictated by contemporary culture. The course intends to offer to the student food for thought and opportunities for verification on topics of great interest and at the same time of relevant relevance.
In particular, the course aims to:- Contribute to the improvement of knowledge and skills on the theme of urban quality, investing in this commitment all public and private actors of the different Calabrian realities, coordinating actions between those who "use cities", "who design the cities" and "who governs the cities ". In this sense, it is intended to urge the public administrations to prepare programmatic actions, at different levels and at different scales, for the management of the complexity of urban transformations.

- Operate towards a new identity of the city through the enhancement and "systemisation" of economic resources, tourist and cultural potentials, involving citizens in participatory processes capable of facilitating the emergence of strategic projects that have the capacity to influence organic development and improving the quality of life.

- Promote and develop the culture of accessibility, understood as the possibility of overcoming architectural, environmental, urban and management obstacles, through the application of the principles of Universal Design, ie a responsible design for an easy and safe use of space and equipment from an extended user.

Prerequisites

The course is aimed at students who have already developed their own design sensitivity and allows the integration of the general knowledge of the requirements that allow the production of design solutions that tend to improve the quality of life of the inhabitants.

Course program

"From the analysis of the context to the sustainable city project: Urban design and new methodologies of approach", as overcoming the canonical and consolidated practices of urban planning for the city project, is represented by the "systemic" approach that, starting from the 'observation of the context and its interpretation, declines procedures for the project intervention that are assumed as "best-practice guides". All this in full harmony with the key character of the contemporary practice of Urban Design and through the ability to integrate the interest in the visual, aesthetic and functional aspects of the urban form aimed at responding to the questions expressed by citizens, with greater sensitivity for the themes of the environment, security and social inclusion.
The main phases of the course are summarized with respect to specific actions aimed at providing indications on how:
• look at the city;
• define the type of public spaces;
• carry out qualitative and use analysis of the space by the users;
• interpret the criticality / potential of the area in question;
• identify the references of best practices, design guidelines, etc. compatible for the definition and resolution of the identified criticalities;
• propose meta-project solutions in relation to the different levels of the considered urban space.

All the design solutions identified to intervene on the critical issues will be used in case studies susceptible to subjective interpretation, therefore, the student will engage in a project activity (also in a group) checked in the classroom periodically and the conclusion will be in the form of workshops.

Expected Results (acquisition of knowledge by the student)

The aim of the course is to provide the student with the knowledge of the relations in the construction of the architecture are established between form and content, between the social purposes of the environmental transformation and the means offered by the production, including the use of materials and their performance, between the logic of space, the logic of functions and structural reasons, in order to develop the capability to conceive, design and graphically return the key building blocks and their assemblies, verifying the economic and congruences regulations, controlling the role that materials and performing techniques in architectural design, the realization and, more generally, in the programming process-design-production use of an artifact.
Another important objective of the course is to stimulate the ability to design and draw the key building blocks and their assemblies, placing the necessary attention to the appropriateness of the technical choices to achieve the well-being of users, compared to the condition determined by the physical, economic, productive and social and local culture.
Energy saving, reduction of emissions and waste, healthy environment are inseparable objectives by achieving a global quality of the project.
The technical procedures for achieving these objectives, architectural solutions can be very different from each other, the reinterpretation and innovation of materials and traditional technologies, the sandwich construction Cleaning, at the construction site as a "kit" assembly.

Self-employment of the student

Lectures (hours / year in the classroom): 20
Exercises (hours / year in the classroom): 25
Practical activities (hours / year in the classroom): 15

Self-work of the student

The autonomous activities of the student, who altogether must engage them for 90 hours, are as follows:
• 60 hours of individual study to consolidate the theoretical knowledge related to the first two phases of the course;
• 30 hours of practical work aimed at autonomously concluding the graphic works produced during the laboratory activities

Assessment methods

There were two strong ideas that we intend to carry forward:
-Integration of the knowledge necessary to face the challenges posed to the phenomenon of disability, generally from the consideration of an extended user, and the style of Universal Design. In particular, it is considered useful to provide future designers with a minimum tool that can enable them to understand the legal phenomenon so that they are not completely alien to them and could orient themselves in the rules on

accessibility.

- The need to go "beyond the norm", to understand its true meaning and usefulness for the human being (biodiverse): to stimulate the sense of responsibility in the imagination of every professional and citizen. The will is to convey the idea that the important thing is not "doing things according to law" but working for the common good that also passes through a clever and intelligent organization of the spaces built to be a comfortably accessible, accessible and safe environment fit for everyone.

The course includes a series of communications that will progressively develop the training path with possible practical activities in the classroom useful for sedimenting the results of the didactic contributions provided. The final verification will be done through a theoretical examination and the commentary of the project elaborated accordi\ng to the course.

Suggested reading materials

Testi docente

(2003) Centro di Documentazione sulle Barriere Architettoniche (a cura di) Linee guida per la redazione del piano di eliminazione barriere architettoniche, Assessorato alle Politiche Sociali Segreteria all'Ambiente e ai Lavori Pubblici Direzione Lavori Pubblici, Regione Veneto.
(1960) Lynch K., The image of the city, The MIT Press, Cambrige, Massachussetts-London, (tr. It. L'immagine della città, Marsilio editore, Venezia, 1964).
(1990) K. Lynch, Progettare la città. La qualità della forma urbana, ETAS libri, Milano. (ed. it.).
(2005), Bagnato F., La città accessibile, in "La città per tutti" Arch n°4, rivista dell'Ordine degli Architetti pianificatori e paesaggisti della Provincia di Reggio Calabria.
• D.M. 14 giugno 1989, n. 236 (Prescrizioni tecniche necessarie a garantire l'accessibilità, l'adattabilità e la visitabilità degli edifici privati e di edilizia residenziale pubblica sovvenzionata e agevolata, ai fini del superamento e dell'eliminazione delle barriere architettoniche)

Sitografia di riferimento:

http://europa.eu/pol/trans/index_it.htm sito delle attività dell'Unione europea
www.ocs.polito.it - Osservatorio Città Sostenibili (Politecnico e Università di Torino) sezione Mobilità
www.mobilitàsostenibile.it - Portale italiano guida alla mobilità sostenibile
www.clickmobility.it - portale italiano della mobilità e del trasporto passeggeri

It is possible to download the didactic materials useful for the preparation of the exam from the page of the course "accessibility, usability and safety" of the Facebook, or, from the university site in the section "subject sheet" of the course of Materials for architecture, inserted from prof. F. Bagnato