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|-------|--------------------------------|------------------------------|
| Date: | <b>REGISTRATION OF COURSES</b> | RESPONSIBLE OF REGISTRATION: |
|-------|--------------------------------|------------------------------|

| AREA OF KNOWLEDGE                               | SUB-AREA            | UNDERGRADUATE | POSTGRADUATE |
|---|---------------------|---------------|--------------|
| <b>BASIC SCIENCES</b>                           |                     |               |              |
| ECONOMICS AND SOCIAL SCIENCES                   |                     |               |              |
| <b>HEALTH SCIENCES</b>                          |                     |               |              |
| <b>ENGINEERING, ARCHITECTURE AND TECHNOLOGY</b> | <b>ARCHITECTURE</b> | <b>X</b>      |              |
| <b>EDUCATION SCIENCES</b>                       |                     |               |              |
| HUMANITIES AND ARTS                             |                     |               |              |
| <b>AGRICULTURAL AND SEA SCIENCES</b>            |                     |               |              |
| <b>MILITARY ARTS AND SCIENCES</b>               |                     |               |              |
| SAFETY AND CIVIL PROTECTION                     |                     |               |              |
| <b>INTERDISCIPLINARY</b>                        |                     |               |              |
| <b>OTHERS</b>                                   |                     |               |              |

**ADSCRIPTION OR BRANCH (ES):**

|            |                                     |
|------------|-------------------------------------|
| FACULTY    | Architecture and Urbanism           |
| SCHOOL     | Architecture CARLOS RAUL VILLANUEVA |
| INSTITUTE  |                                     |
| DEPARTMENT | Environmental Conditioning          |
| OTHERS     |                                     |

**COURSE:**

|                    |   |
|--------------------|---|
| NAME               | Environment and Building 97                 |
| CODE               | 4041  |
| EXECUTIVE UNIT     |   |
| CLASSIFICATION     | Compulsory                                  |
| APPROVAL DATE      |   |
| UPDATE DATE        |   |
| APPROVAL AUTHORITY | FACULTY COUNCIL                             |
| CREDIT UNITS       | 3 (THREE)                                   |
| HOURS/WEEK         | 3 (THREE)                                   |
| REGIMEN            | Semi-Annual                                 |
| ACADEMIC PERIODS   | Regular                                     |
| REQUIREMENTS       | Human Settlements and Design 1.3            |
| PROFESSOR          | Yuraima Martin, Daniela Sardi, Glenda Yépez |



## PURPOSES

- To provide the student of a theoretical-conceptual framework which allows them be capable to recognize, to analyse and to evaluate the relation establish between the architecture and environment that contain it, as well as, be able to distinguish the role that plays architecture on the environmental dynamic, its transforming character and its unavoidable vocation of produce life quality.
- To provide the student with value criteria to the identification and comprehension of environmental variables behaviour in the design processes.

## LEARNING OBJECTIVES

To provide tools and theoretical instruments necessary for contribute to the student be able to:

- Identify, distinguish and establish the basic principles of the contemporary environmental topical.
- Comprehend the systemic approach as a particular form to explain the environmental reality. The environment as a system.
- Recognize the importance of the relation OBJECT-CONTEXT: Identify the environmental variables and relations between them.
- Identify and comprehend the performance and management of environmental, physical, biotic, and sociocultural variables as resource and source of knowledge in the development of the architectural design processes.
- Identify the environmental variables which characterize the extreme biogeographic regions in Venezuela and how those determine the building design process.
- Recognize the importance of architecture as expression of the territory where is developed.
- Recognize the importance of architecture as cultural expression of society within is developed and the necessity to rescue its ethical and social character.
- Identify the fundamentals and recognize the importance of the site analysis as methodology in the field of architectural projection.
- Critically analyse the environmental issue in the professional field of architecture in Venezuela.
- Evaluate, from the environmental perspective, selected cases of contemporary Venezuelan architecture.



## CONTENTS

### **TOPIC 1: The relationship between environment-architecture**

- Historical evolution of the society-nature relationship, transformations that origins the basic principles of the contemporary environmental thought.
- The concept of the environment; its socio-physical, dynamic and relationship character: a particular manner to explain the reality.
- Definition of the three groups of environmental variables: physical, biotic and socio-cultural.
- The environment, study object and source of knowledge of architecture.
- The “place” as a concrete expression of the environment.
- The architecture (object) as a modifier/transformer of the environment (context), as the cultural product of the man in its relationship with nature.
- The environmental matter in the formation of the architect.

### **TIPOC 2: Environmental variables and its incidence in the process of architectural projection**

- The physical-natural environmental variables as a resource in the process of architectural projection.
- The biotic-natural environmental variables as a resource in the process of architectural projection.
- The socio-cultural environmental variables as a resource in the process of architectural projection.
- Dynamic inter-relations that are established between the physic, biotic and socio-cultural environmental variables.
- The environmental inventory (SITE ANALISIS) as a methodology that contributes to the comprehension of the place and fundamentals the criteria definition of design in the design process projection.
- The environmental inventory (SITE ANALISIS) as a methodology that contributes to the comprehension of the place and fundamentals the definition of design criteria in the process of architectural projection.
- The diagnosis: Determination of potentialities and constraints of a place to be built.
- Establishing the architectural design criteria from the consideration of the behaviour of own environmental variables of the BIOCLIMATIC REGIONS of Venezuela.

### **TOPIC 3: Considerations regarding the environmental topic in the professional practice of the contemporary Venezuelan architecture**

- Critical analysis, from the environmental perspective, of the professional practice of architecture in Venezuela.
- The environmentalist vocation of Venezuelan architecture
- Sustainability notion in architecture: Buildings projects that are elaborated under the sustainability criteria. Case studies.



### **INSTRUCTIONAL STRATEGIES**

The architectural fact occurs and is structured in the environment, therefore its approach must be thought from natural and socio-cultural dimensions that characterize this main scope. From this way we recognize the unavoidable transforming character of architecture over the environment in which we act, and consequently, its incidence in the quality life of who inhabits it; as well as the determinant character of the environment over the places configured by architecture.

From these premises, this course of theoretical/practical character that offers to the architecture student the theoretical fundamentals and conceptual tools that allows them to comprehend the complexity of reality in which develops their design projects. Initiates to the student in the knowledge and management of the environmental variables, the relationships that are established between them and how it can contribute on the achievement of architectural solutions that recognize and comprehend the territorial and social reality where are placed.

### **INSTRUCTIONAL MEDIA**

- Master classes
- Analysis of selected texts.
- Field visits to study areas
- Didactic tours to University City, Botanical Garden, and East Park.
- Analysis of projects and built buildings.
- Transparencies, slides, videos, etc.
- Study guides

### **EVALUATION**

30% Workshops  
20% Written test  
40% Fieldwork: cases study  
10% Attendance and participation



### **TEXTBOOKS (If possible, according to contents)**

**CURIEL, Ernesto:** (1982) La Arquitectura en Regiones de Venezuela. Trabajo para optar al ascenso en el Escalafón Universitario, de profesor Instructor a profesor Asistente.

**FRAMPTON, Kenneth:** (1981) Historia crítica de la arquitectura moderna. Gustavo Gilli. Barcelona.

**GUITTIAN, Carmen Dyna:** (1983) Docencia e investigación en estudios ambientales y arquitectura. Aproximación a un modelo. Trabajo de ascenso a escalafón Asistente mimeo. Inédito FAU-UCV, Caracas.

**INSTITUTO DE DESARROLLO EXPERIMENTAL DE LA CONSTRUCCIÓN- IDEC** (2004) "Manual de diseño para edificaciones energéticamente eficientes en el trópico". Facultad de Arquitectura y Urbanismo de la Universidad Central de Venezuela, Fondo Nacional de Ciencia y Tecnología y C.A. La Electricidad de Caracas.

**LEON, Jose-Balbino:** (1981) Ecología y Ambiente en Venezuela. Editorial Ariel-Seix Barral Venezolana, Caracas.

**LEON, Jose-Balbino:** (1988) Contribución de la ciencia ambiental a la formación del arquitecto paisajista. Trabajo presentado FAU para ascender a la categoría de profesor Titular en el Escalafón de Profesorado de la Universidad Central de Venezuela, (mimeo).

**LYNCH, Kevin:** (1980) Planificación del sitio. Editorial Gustavo Gilli. Colección Arquitectura/Perspectivas.

**MC HARG, Ian:** (1971) Design with Nature. New York, Doubleday.

**MEROLA, Giovanna:** (1987) La relación hombre-vegetación en la ciudad de Caracas. (Aporte al estudio de la arquitectura paisajista de Caracas). Caracas. Biblioteca de la Academia Nacional de la Historia. #84 de la serie de Estudios, monografías y Ensayos.

**MEROLA, R, Giobanna:** 1993. "Vegetación y Diseño". Fundación Instituto Botánico de Venezuela. Fundación Polar. Caracas.

**MUNTAÑOLA, Josep:** (2000) Topogénesis: Fundamentos para una nueva arquitectura. Arqitext. N° 11. Escuela Técnica Superior de Arquitectura de Barcelona, Universidad Politécnica de Cataluña, España.

**VILLANUEVA, Carlos Raúl** (1980) Textos escogidos. Centro de Información y documentación de la FACULTAD DE Arquitectura y Urbanismo de la Universidad Central de Venezuela.