



Date:	<b>REGISTRATION OF COURSES</b>	RESPONSIBLE OF REGISTRATION:
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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
INSTITUTE	
DEPARTMENT	Environmental Conditioning
OTHERS	

**COURSE:**

NAME	<b>LANDSCAPING</b>
CODE	A100
EXECUTIVE UNIT	
CLASSIFICATION	Optative/ Theoretical
APPROVAL DATE	
UPDATE DATE	
APPROVAL AUTHORITY	Faculty Council
CREDIT UNITS	Three (3)
HOURS/WEEK	Three (3)
REGIMEN	Semi-Annual
ACADEMIC PERIODS	Regular and Summer Semester
REQUIREMENTS	ENVIRONMENT AND BUILDING 97 CODE 4041
PROFESSOR	



## PURPOSES

Environmental planning combines knowledge and capacities proper of the ecological sciences. Conserves the landscaping, aesthetic and ornamental tradition, complementary of the building and city, but developed with a new sense, oriented towards the preservation and balance of the natural environment with the diverse human facilities of the current era. Environmental planning is one of the tools of technic character which involves multi-disciplinary physical, biotic and socio-cultural aspects, which entails to establish criteria and creative capabilities in the field of design of habitable spaces.

This course comprises the study of physical, biotic and socio-cultural factors which constitute the environment, both in the referring to systematic, morphologic and physiologic aspects of itself, as well as fundamental part of the ecological knowledge, basic for the landscaping planning and design.

## LEARNING OBJECTIVES

- To expose in a systematic way, the main principles of the eco-system and its fundamental interactions.
- Identify and recognize on each site the factors which come into play in the comfort and health of people.
- To provide to the student the basic knowledge regarding vegetal ecology.
- To offer a broad vision of the vegetal diversity and its interrelation with the environment.
- To allow the deepness of knowledge regarding environmental variables, in this case, the vegetation, as fundamental for the environmental design and planning.
- To teach the student the ability to interpret and analyse the concepts and factors of the vegetal ecology that must be taken into account for the landscape design.



## CONTENTS

### 1. Introduction

- Definition of the purpose and objectives of the course.
- Review of the previous knowledge
- Course methodology

### 2. The ecosystem structure

- Physical factors: Climate, geology, geomorphology, physiography, hydrology, soils.
- Biotical factors: Producers, consumers, decomposers.
- Relations: Dynamic behaviour of ecosystems. Their interactions.

### 3. The vegetation and its relation with the environment

- Vegetal taxonomy principles. Classification and identification systems.
- Concepts of limiting factors of vegetation: soil, water, temperature, light, fire, biotic factors (fauna).

### 4. Environmental control with vegetation

- Utilitarian employment of vegetation: Erosion control of soils with vegetation. Wind control with vegetation. Acoustic control with vegetation. Traffic control with vegetation. Lighting control with vegetation. Air purification.

### 5. Usage of vegetation for different environments

- Solar radiation control with vegetation. Wind control with vegetation. Precipitation control with vegetation. Temperature control with vegetation.

### 6. Basic principles of the design with vegetation

- Usage of plants in landscape design. Spaces articulation. Perception and definition of spaces. Screens and barriers of spaces.

### 7. Aesthetic usage of the plants

- Visual effects: Colour, form, texture, others. Perspective controls. Visual controls. Attraction, emphasise, unification, delineation and other controls.

### 8. Work criteria for the landscape design

- The landscaping. In the regional, urban and local scope.
- Relationship between landscaping-ecology and architecture. Design criteria for public, semi-public and private spaces.



### INSTRUCTIONAL STRATEGIES

- Professor lectures
- Textbook consults
- Projects discussion
- Audio-visual technics

### INSTRUCTIONAL MEDIA

- Specialized textbooks
- Prepared guides by the professor
- Audio-visual material
- Maps
- Charts and graphics

### EVALUATION

- Two partial evaluations of 15% each
- A final work 50%
- Readings control 10%
- Participation 10%

### TEXTBOOKS

ARISTIGUIETA, L. (s/f). El parque del este; sus plantas y sus ambientes.

DAUBENMIRE, R. (1959). Plants and Environment. New York.

EWEL, J. y Madriz (1978). Zonas de via en Venezuela. Editorial Mc Graw Hill. Caracas.

ODUM, E. (1972). Ecología. Editorial Interamericana. México.

OLYGAY, V. (1979). Design with climate. Princeton University. New Jersey.

POLER, M. (s/f). Clima y Arquitectura. Publicaciones del Banco Obrero. Caracas.

PUPO, E. (s/f). Acondicionamiento natura y Arquitectura. Boixaireu Editores. Barcelona.

STASBURGEN, E. (1974). Tratado de Botánica. Editorial Marín. Marcelona.

ZION, Robert (1979) Trees for Archiecture and Landscape. New York.