

Promulgation of the Syllabi for the Subjects in the Architecture Licensure Examination

PREAMBLE

1. The following syllabi are intended to guide prospective candidates in preparation for the Architecture Licensure Examination. In general, they cover areas in which examinees are expected to have knowledge, understanding, and competencies when they start to practice the architectural profession.
2. The general coverage of the examination is divided into three major areas with their corresponding weights as follows:
 - a. History and theory of architecture; principles of planning; architectural practice (30%)
 - b. Structural design; building materials and construction; utilities (30%)
 - c. Architectural design and site planning (40%)
3. Each major area is subdivided into specific sub areas or concerns, as well as their corresponding rationale and description.
4. These syllabi shall be made available to all recognized schools of architecture in the country, the United Architects of the Philippines, and other concerned entities.

Area A

HISTORY AND THEORY OF ARCHITECTURE; PRINCIPLES OF PLANNING; AND ARCHITECTURAL

PRACTICE Part I

HISTORY OF ARCHITECTURE

A. Rationale and Description

1. Analysis of architectural manifestations from the beginning of civilization to contemporary periods of development;
2. Analysis of the influences of environmental, historical, and sociocultural factors and their relevance to the development of art, buildings, structures, as well as of human settlements.

B. Scope

1. Introduction
 - a. History
 - b. History of architecture
 - c. Historic style of architecture
 - d. Origin of architecture
 - e. Factors affecting the style of architecture
2. Pre-Historic Architecture
 - a. Centers of development
 - b. Dolmen, Menhir, Cromlech
3. Historic Styles of Architecture
 - a. Period/extent and centers of development

- b. Factors that affect the development of architectural style (historical, environmental, and socio-cultural)
- c. General characteristics (architectural, structural, decorative)
- d. General contributions
- e. Notable examples

3.1 Ancient architecture and the Western succession

- a. Egyptian
- b. West Asiatic
- c. Greek
- d. Roman
- e. Early Christian
- f. Byzantine
- g. Romanesque Architecture in Europe
- h. Gothic Architecture in Europe
- i. Renaissance Architecture in Europe
- j. Nineteenth and Twentieth Century in Great Britain
- k. Architecture of Africa, Australia, and New Zealand
- l. Nineteenth and Twentieth Century architecture in Continental Europe
- m. Architecture of the Americas

3.2 Architecture in Asia and the Pacific Region

3.3 Architecture in the Philippines

- a. Architectural legacies
- b. Architectural preservation, conservation, and restoration
- c. Pillars of Philippine Architecture

Part II

THEORY OF ARCHITECTURE

A. Rationale and Description

1. Understanding of the theories and principles of design and architectural design process;
2. Analysis of anthropometric, proxemic, and kinesthetic requirements of space in relation to architectural design;
3. Analysis of sociocultural and technological trends which are contributory to the development of contemporary architecture

B. Scope

1. Introduction
 - a. The nature of architecture
 - b. Architecture as art and science
 - c. Processes in architectural design
2. Elements of Architecture and Basic Principles of Design
 - a. Need-specific elements
 - b. Structural, circulatory protective, and decorative elements
 - c. Influences in architectural design
 - d. Basic principles of design
3. Design Perception
 - a. Anthropometric basis of architectural design

- b. Space articulation and territoriality
 - c. Visual and perceptual language
 - d. Psychology of space
 - e. Proxemics and culture
4. Tropical Architecture
- a. Influences and elements of tropical architecture
 - b. Specific examples of tropical architecture
5. Masters of Architecture
- a. Philosophies of Great Architects
 - b. Examples of great works

Part III

ARCHITECTURAL PRACTICE

A. Rationale and Description

1. Understanding of the role, legal rights and obligations, and responsibilities of the architect;
2. Analysis and application of the various statutes, codes, and regulations affecting the practice of architecture in the Philippines;
3. Understanding of the various aspects of the professional practice of architecture, including tools and techniques related to production, construction, resource allocation, and project management, as well as the efficient conduct of client and business relations for building design and construction projects.

B. Scope

1. Certification of Architects and Standards of Professional Practice
 - a. Statutes regulating the practice of architecture in the Philippines
 - b. Professional organization of architects
 - c. Architects- Code of Ethics
 - d. Rights and responsibilities of the profession
 - e. Spectrum of architectural services
 - f. Architectural fees and charges
 - g. Architectural competitions
2. Building Standards, Laws, and Regulations
 - a. Architectural design standards, building and construction-related laws
 - b. Laws on real estate and subdivisions
 - c. Laws on housing and human settlements
3. Aspects of Architectural Practice
 - a. Operating divisions of architectural practice, development, production, administration, and management (with emphasis on preparation of contract documents)
 - b. Specifications writing and quantity surveying
 - c. Legal and business aspects of architectural practice

Part IV

THEORY AND PRINCIPLES OF PLANNING

A. Rationale and Description

1. Analysis of the concepts and techniques in the general planning process, urban and regional planning, land use planning, and human settlements planning;
2. Understanding of the art and science of site planning with emphasis on ecological, socio-psychological, aesthetic, and functional basis of site planning.

B. Scope

1. General Principles of Planning
 - a. Definitions and classification
 - b. History and scope of planning
 - c. General planning process
2. Urban and Regional Planning and Urban Design
 - a. History of the city and the region
 - b. Theories of urban and regional planning
 - c. Comprehensive planning
 - d. Land use planning
 - e. Urban design
 - f. Urbanization and urban social relationships
3. Housing and Human Settlements Planning
 - a. Definition and classification
 - b. Housing policies and programs
 - c. Housing finance, production, and practices
4. The Art and Science of Site Planning and Landscape Architecture
 - a. Site analysis and site development
 - b. Landscape design
 - c. Primary considerations in site planning and development (physical and aesthetic, ecological, socio-psychological, management, and maintenance).

Part III UTILITIES

A. Rationale and Description

1. Understanding of the basic practices, principles, general design and installation, and/or construction of utilities required for a building or structure and its premises;
2. Analysis of utility, facility, and equipment requirements in relation to aesthetics, function, and strength of a building or structure and its premises.

B. Scope

Design and construction and/or installation of the following utilities systems:

1. Sanitary and Plumbing Systems and Equipment
 - a. Water source, storage, supply, and distribution
 - b. Plumbing roughing-in and fixtures
 - c. Drainage and sewerage systems
 - d. Waste disposal, treatment, and recycling

2. Mechanical Systems
 - a. Heating, ventilating, and air-conditioning systems
 - b. Conveyors and other building mechanical equipment
3. Electrical and Other Power Systems
 - a. Electrical power and lighting supply, distribution, and fixtures
 - b. Electrical power source and alternative power sources
4. Acoustics and Illumination
 - a. The psycho-physics of acoustics and lighting
 - b. Acoustical treatment and corrections
5. Disaster Prevention and Protection Systems; Security Systems
 - a. Building fire-fighting, prevention, and protection apparatus
 - b. Installation and/or construction
 - c. Materials and fixtures
 - d. Disaster prevention and mitigation systems
6. Communication Systems
 - a. Electronics system
 - b. Telephone, intercom, cable TV, audio/video facilities, PA system
7. High-tech Systems
 - a. Application in buildings and structures
 - b. Robotics
 - c. Intelligent buildings

Area B

STRUCTURAL DESIGN; BUILDING MATERIALS AND METHODS OF CONSTRUCTION; AND UTILITIES

Part I

STRUCTURAL DESIGN

A. Rationale and Description

1. Understanding of the fundamentals of mechanics, strength of materials, and theory of structures;
2. General design, principles, and analysis of the structural elements of various types of construction materials and systems.

B. Scope

General application of structural design, including seismic analysis, in the following building materials and construction systems:

- a. Timber
- b. Reinforced concrete
- c. Structural steel
- d. Composite structures
- e. Advanced construction methods

Part II BUILDING MATERIALS AND METHODS OF CONSTRUCTION

A. Rationale and Description

1. Understanding of the properties of building construction and finishing materials; their application and articulation; systems and methods of specifying and construction;
2. Application of the principles of design and construction methods of various types of materials used in construction.

B. Scope

The design and specifications of materials and methods of construction for the following works:

- a. Civil works
- b. Carpentry and joinery
- c. Concrete and masonry
- d. Sheet metal and tinsmithry
- e. Structural steel
- f. Concrete and reinforced concrete
- g. Waterproofing, damproofing, and insulation
- h. Glass and glazing
- i. Painting and varnishing
- j. Fenestration
- k. Hardware
- l. Specialized works (bank vaults; signage; etc.)

Area C ARCHITECTURAL DESIGN AND SITE PLANNING

A. Rationale and Objectives

1. Application of logical approach to design and site planning solutions to architectural problems with emphasis on design methodology, qualitative and quantitative aspects of space, circulation and interrelationships of space, structural and form envelopes, and building utilities and facilities.

2. Application of skills and ability to visualize architectural design problems and present solutions in appropriate graphical language.

B. Scope

Architectural design and site planning problems involving the following types of buildings and structures and their built environment;

1. Residential
 - a. Residential houses and subdivisions, apartment, housing for special groups (low-cost housing, housing for the aged etc.)
 - b. Lodging houses, etc.

2. Commercial and Business
 - a. Business (office, bank, hotel, etc.)
 - b. Commercial (department store, market, retail store, etc.)
 - c. Mixed business-commercial or mixed business-residential

3. Industrial and Agricultural
 - a. Large-scale industry (manufacturing, shipyard, etc.)
 - b. Small-scale industry (factory, cinema studio, etc.)
 - c. Mixed industrial-residential
 - d. Industrial estate/agro-industrial establishment

4. Public and Government
 - a. Educational and cultural (schools, research laboratory, public hall, library, museum, historical/ monumental building/structures, etc.)
 - b. Health and medical (hospital/clinic, health fitness club, specialized medical center, etc.)
 - c. Governmental and quasi-public (national or public building, police/fire stations, embassy/consulate, penitentiary, etc.)
 - d. Parks and recreational (ecological/botanical gardens, theater, cinema, casino, beach resort, etc.)
 - e. Sports and athletics (sports plaza, stadium, gymnasium, golf course, tennis/basketball courts, billiard hall, etc.)
 - f. Religious and funerary (church, temple, mosque, monastery, convent, seminary, crematorium, memorial park, cemetery, etc.)

5. Facilities
 - a. Transportation (airport, seaport, railway station, terminal, port facilities, pier, etc.)
 - b. Service (power station, water treatment/filtering plant, sewerage, crematory, slaughterhouse, TV-Radio-Telephone stations, newspaper plant, etc.)
 - c. Military (military camp, depot, etc.)

6. Complex Projects (involving a combination of several buildings and structures in a given site or area).