

# ALANYA HAMDULLAH EMİN PAŞA UNIVERSITY FACULTY OF ARCHITECTURE DEPARTMENT OF ARCHITECTURE CURRICULUM and COURSE CONTENTS

### CURRICULUM

1 <sup>ST</sup> YEAR FALL SEMESTER							
Code	Course Name	т	L	AC	ECTS		
ARCH 111	Introduction to Architectural Concepts	3	0	3	3		
ARCH 113	Drawing and Presentation Techniques	2	2	3	4		
ARCH 103	Graphic Communication I	2	2	3	4		
ARCH 101	Basic Design	2	6	5	10		
ENG 101	English 1	4	0	4	5		
GE 101	University Culture	2	0	2	2		
TKL 101	Turkish Language 1	2	0	2	2		
		Total		30			
	1 <sup>ST</sup> YEAR SPRING SEMESTER	•					
Code	Course Name	т	L	AC	ECTS		
ARCH 114	Digital Presentation in Architectural Design	2	2	3	4		
ARCH 104	Graphic Communication II	2	2	3	4		
ARCH 102	Introduction to Architectural Design	2	6	5	10		
ENG 102	English 2	4	0	4	5		
GE 102	City Culture	2	0	2	2		
TKL 102	Turkish Language 2	2	0	2	2		
MAT 102	Mathematic	3	0	3	3		
Total							
	2 <sup>ND</sup> YEAR FALL SEMESTER	I	I				
Code	Course Name	Т	L	AC	ECTS		
ARCH 203	Computer Aided Design	2	2	3	4		
ARCH 251	Building Elements and Materials	2	2	3	4		
ARCH 231	Statics	3	0	3	4		
ARCH 221	History of Architecture I	3	0	3	3		
ARCH 201	Architectural Design I	2	6	5	10		
GE 201	Social Responsibility and Ethics	3	0	3	3		
HIST 201	History of Turkey 1	2	0	2	2		
Total					30		



2 <sup>ND</sup> YEAR SPRING SEMESTER							
Code	Course Name	т	L	AC	ECTS		
ARCH 200	Summer Practice 1 (Site)	0	0	0	5		
ARCH 282	Building Physics and Environmental Control I	3	0	3	3		
ARCH 252	Building Construction Technologies	2	2	3	4		
ARCH 232	Contemporary Structural Systems	2	2	3	3		
ARCH 222	History of Architecture II	3	0	3	3		
ARCH 202	Architectural Design II	2	6	5	10		
HIST 202	History of Turkey 2	2	0	2	2		
			Total		30		
	3 <sup>RD</sup> YEAR FALL SEMESTER						
Code	Course Name	т	L	AC	ECTS		
ARCH 311	Urban Design	2	2	3	5		
ARCH 381	Building Physics and Environmental Control II	3	0	3	4		
ARCH 331	Construction Project	2	2	3	5		
ARCH 321	History of Architecture III	3	0	3	3		
ARCH 301	Architectural Design III	2	6	5	10		
ELEC 001	Elective Course	-	I	-	3		
			Т	otal	30		
	3 <sup>RD</sup> YEAR SPRING SEMESTER						
Code	Course Name	т	L	AC	ECTS		
ARCH 300	Summer Practice 1 (Office)	0	0	0	5		
ARCH 332	Structural Design in Architecture	2	2	3	3		
ARCH 302	Architectural Design IV	2	6	5	10		
ELEC 002	Elective Course	-	-	-	3		
ELEC 003	Elective Course	-	-	-	3		
ELEC 004	Elective Course	-	-	-	3		
ELEC 005	Elective Course	-	-	-	3		
Total							
4 <sup>™</sup> YEAR FALL SEMESTER							
Code	Course Name	т	L	AC	ECTS		
ARCH 441	Principles of Conservation and Historic Buildings	2	2	3	5		
ARCH 401	Architectural Design V	2	6	5	10		
GE 401	Systems Thinking	2	0	2	3		
ELEC 006	Elective Course	-	-	-	3		



ELEC 007	Elective Course	-	-	-	3		
ELEC 008	Elective Course	-	-	-	3		
ELEC 009	Elective Course	-	-	-	3		
			Total		30		
4 <sup>TH</sup> YEAR SPRING SEMESTER							
Code	Course Name	т	L	AC	ECTS		
ARCH 472	Professional Practice	3	0	3	5		
ARCH 402	Architectural Design VI	2	6	5	10		
GE 402	Innovation and Entrepreneurship	2	0	2	3		
ELEC 010	Elective Course	-	-	-	3		
ELEC 011	Elective Course	-	-	-	3		
ELEC 012	Elective Course	-	-	-	3		
ELEC 013	Elective Course	-	-	-	3		
			Т	otal	30		

ELECTIVE COURSES						
Code	Course Name	т	L	AC	ECTS	
ARCH 316	Work Preparation in Construction Projects and Scheduling Methods	3	0	3	3	
ARCH 322	History of Art and Architecture IV	3	0	3	3	
ARCH 326	Model Making	3	0	3	3	
ARCH 328	Typmorhological Analysis in Urban Studies	3	0	3	3	
ARCH 330	Architecture and Utopias	3	0	3	3	
ARCH 351	Construction Management	2	2	3	3	
ARCH 411	Analysis of Investments	2	1	3	3	
ARCH 413	Architecture as Power and Politics	3	0	3	3	
ARCH 421	Introduction to Site Analysis and Conceptual Diagrams	2	2	3	3	
ARCH 422	Total Quality Management in Construction Projects	3	0	3	3	
ARCH 424	Building Information Modeling	3	0	3	3	
ARCH 425	Bauhaus	3	0	3	3	
ARCH 426	Executive Design	3	0	3	3	
ARCH 428	Occupational Health and Safety Legislation	3	0	3	3	
ARCH 429	Social Media Spaces	3	0	3	3	
ARCH 430	Architectural Psychology of Environment	3	0	3	3	
ARCH 431	History of Architectural Photography	3	0	3	3	



ARCH 433	Introduction to Photography	3	0	3	3
ARCH 435	Theory of Subjectivity in Architecture	3	0	3	3
ARCH 437	Industrial Kitchen and Restaurant Design	3	0	3	3

\* T: Theory, L: Laboratory, AC: AHEP Credits, ECTS: European Credit Transfer System.

# **COURSE CONTENTS**

# 1<sup>ST</sup> YEAR FALL SEMESTER

# **ARCH 101 Basic Design**

Prerequisite: None Credit: AC: 5 ECTS: 10

It comprises Design exercises at various scales and complexities to development of mental, perceptual and manual skills in the presentation of design ideas to establish visual values for structuring and articulating two and three dimensional spatial compositions in different media.

### **ARCH 111 Introduction to Architectural Concepts**

Prerequisite: None

Credit: AC: 3 ECTS: 3

An intermediate course to explore the concepts of history and theory of architecture from the earliest structures to concepts of present day. Historic styles, key buildings, architectural movements, celebrated architects, from all around the world. Greek orders, Roman engineering, Gothic architecture, Renaissance, Baroque, Art Nouveau, Art Deco, Modernism, Postmodernism. Technical aspects like materials, technology, Interaction with art, aesthetics, economics and human needs.

### **ARCH 113 Drawing and Presentation Techniques**

Prerequisite: None

Credit: AC: 3 ECTS: 4

It comprises Design exercises at various scales and complexities while introducing students about the principles of visual thinking, progress in expression of the designs. Students will be able to aware of their own capacities, to express the problems of their designs, be able to comprehend the visual language of design.

### ARCH 103 Graphic Communication I

Prerequisite: None

Credit: AC: 3 ECTS: 4

The course of Graphic Communication deals with the concept of communication through drawing techniques. It introduces theories, research and production directed to field of specialization in Graphic Communication. Graphical communication involves using visual and technical material to introduce technical presentation techniques (plans, sections, elevations, scale, coding, etc.) in architectural world.

#### **1<sup>ST</sup> YEAR SPRING SEMESTER**



# ARCH 102 Introduction to Architectural Design

Prerequisite: to be successful – ARCH 101 Credit: AC: 5 ECTS: 10

It comprises Design exercises at various scales and complexities to development of mental, perceptual and manual skills in the presentation of design ideas to establish visual values for structuring and articulating two and three dimensional spatial compositions in different media.

# **ARCH 114 Digital Presentation in Architectural Design**

Prerequisite: None

Credit: AC: 3 ECTS: 4

In this course, students learn how to use computer software as a design tool. The course aims to introduce the fundamental concepts of digital design media, familiarize the students with the common principals of modelling and visualization used in architectural design, and enable the students to develop learning strategies towards goal oriented use of image editor and CAD software.

# **ARCH 104 Graphic Communication II**

Prerequisite: to be successful – ARCH 103

Credit: AC: 3 ECTS: 4

Enhance students skills in translating 2-D floor plans into 3-D space. Exercises, including drawing technical 3D drawings, to expand students ability in visualizing their design concepts and communicate them accurately and convincingly. Students will Learn to use axonometric and perspective drawings to a enhance your ability to create presentations with accurate perspectives and fine graphic details.

# 2<sup>ND</sup> YEAR FALL SEMESTER

### **ARCH 201 Architectural Design I**

Prerequisite: to be successful – ARCH 102

Credit: AC: 5 ECTS: 10

The term will be divided into stages, each one comprising a different phase of the project. The development of the project will be monitored through panel critics. Students will have to present their work several times as shown in the timetable to the panel in order to get a grade for each stage.

### ARCH 203 Computer Aided Design

Credit: AC: 3 Prerequisite: None

ECTS: 4

Introduction to AutoCad2010 interface and drawing environment; Drawing tools; creating Objects; Array commands; creating Layers; Dimensioning drawings; writing Texts and annotations; creating Blocks/WBlocks. Drawing plan layout, 3d modelling of a plan.

# ARCH 221 History of Architecture I

Prerequisite: None Credit: AC: 3 ECTS: 3



The course focuses on concepts in design, art and architecture from Pre-history to Late Middle Age. Selected examples from world architecture and art history are analyzed through planning, design, structure, and function, meaning and social context. Purpose of the course is help students shape knowledge about the developments in art an architecture from earliest findings to Gothic period.

### **ARCH 231 Statics**

Prerequisite: None Credit: AC: 3 ECTS: 4 Free-body diagrams, internal forces, axial forces, shear forces, bending moment, simple beams, trusses, center of gravity, moment of inertia

### ARCH 251 Building Elements and Materials

Prerequisite: None

Credit: AC: 3 ECTS: 4

The aim of the course is to provide students the information and knowledge on the following matters: Human scale and architecture; House design; Design of the Buildings for disabled people; Design of Buildings for Education; Design of Buildings for Cultural Activities; Design of Buildings for Entertainment. Beside the theoretical knowledge, students will be requested to solve design problems of the related topics.

# 2<sup>ND</sup> YEAR SPRING SEMESTER

### ARCH 202 Architectural Design II

Prerequisite: to be successful - ARCH 201

Credit: AC: 5 ECTS: 10

This studio continues to develop the students' design process and explores the concepts and strategies that have the capacity to significantly determine building form. Particular emphasis will be placed on the relationship of design to program, structure and materials through the study of dwellings. Special attention will be paid to an understanding of human scale and its impact upon design. Short sequential exercises enable students to develop an understanding of the use of different materials and their structural implications. Bearing wall, columnar (including free-plan) and modular building systems will be studied. Semester work consists of moderately complex design problems in the urban environment.

### ARCH 222 History of Architecture II

Prerequisite: None

Credit: AC: 3 ECTS: 3

The course focuses on concepts in design, art and architecture from Romanesque architecture to 18<sup>th</sup> century architecture. Selected examples from world architecture and art history are analyzed through planning, design, structure, function, meaning and social context.

# ARCH 282 Building Physics and Environmental Control I

Prerequisite: None Credit: AC: 3 ECTS: 3



This course is designed to provide comfort facilities, cooling, cooling and lighting systems, and strategies designed to ensure the sustainability of future plants and companies.

### **ARCH 252 Building Construction Technologies**

Prerequisite: None

Credit: AC: 3 ECTS: 4

Load bearing structures, framed structures and reinforced structures prenciples and applications.

# **ARCH 232** Contemporary Structural Systems

Prerequisite: None Credit: AC: 3 ECTS: 3

In the first part of the course of Building Construction Technologies the stress-strain relationship will be explained as well as the main materials properties. Parallelly, a significant part of the course will be dedicated to the design and structural analyses of beam elements. The successive part of the course will consist of an introduction to the design of main building materials, i.e., timber, steel, reinforced concrete and masonry. Lastly, the concepts of load tracing, finite element modelling and structural analyses will be outlined.

# ARCH 200 Summer Practice I (Site)

Prerequisite: None

Credit: AC: 0 ECTS: 5

Practice at certain construction site(s) must be verified and reported through consistent documenting, photocopy, and daily activity reports. ARCH 200 is intended to be a self-teaching process for the students of architecture in terms of building site organization and other aspects of building construction. The students are expected to complete their summer practice in a construction site with basic applications in progress.

# **3<sup>RD</sup> YEAR FALL SEMESTER**

### ARCH 301 Architectural Design III

Prerequisite: to be successful – ARCH 202 Credit: AC: 5 ECTS: 10

Arch 301 is a non-exam course as the other Design Studio courses. Therefore, grading will be made according to the work performed by the student during the term. The term will be divided into stages, each one comprising a different phase of the project. The development of the project will be monitored through panel critics. Students will have to present their work several times as shown in the timetable to the panel in order to get a grade for each stage. Through the project process, students are expected to research for new materials, new construction technologies and present their software skills. Students will be expected to be present at the studio, present their work to the panel and participate to discussions during studio hours. Class hours will be essentially used for criticizing the work achieved by the students at home and not for drawing projects.

# ARCH 311 Urban Design

Prerequisite: None Credit: AC: 3 ECTS: 5



The knowledge and understanding gained in this course will be questioned in Arch 301 design studio. The urban design ideas, which will be provided in this course, are supposed to have a positive contribution to analysis of the projects sites and design of exterior space of their designs.

### **ARCH 381 Building Physics and Environmental Control II**

Prerequisite: to be successful - ARCH 282

### Credit: AC: 3 ECTS: 4

The aim of the course is to provide students the basic elements on the following matters: thermodynamics, heat transfer, thermal insulation and energy consumption in buildings, humid air, cooling of buildings, moisture comfort, daylighting and artificial lighting, room acoustics and sound insulation in buildings. The theoretical knowledge will be integrated with applications and exercises on the efficiency of residential buildings.

### ARCH 331 Construction Project

Prerequisite: to be successful – ARCH 252

Credit: AC: 3 ECTS: 5

Comprehending the general principles about the control of environmental factors. Development of architectural solutions by taking into consideration the aesthetic upprehension in accordance with building functions, technical factors, building processes.

# ARCH 321 History of Architecture III

Prerequisite: None

Credit: AC: 3 ECTS: 3

The course focuses on concepts in design, art and architecture from Enlightenment to Millenium. Selected examples from world architecture and art history are analyzed through planning, design, structure, and function, meaning and social context. Purpose of the course is helping students shape knowledge about the developments in art an architecture from Enlightenment to Millenium.

### **3<sup>RD</sup> YEAR SPRING SEMESTER**

### ARCH 302 Architectural Design IV

Prerequisite: to be successful – ARCH 301

Credit: AC: 5 ECTS: 10

In this studio students will deal with the larger urban fabric. Assigned to study a peripheral location or an underachieving central area, students carry out extensive analyses in order to develop an understanding of the physical conditions of the site and the urban forces that operate on it. Students will gain mastery of research, concept development, formal manipulation, and technical skill applied to architectural design projects as well as to gain basic experience in urban design and site planning.

### **ARCH 332 Structural Design in Architecture**

Prerequisite: to be successful – ARCH 331, ARCH 202 Credit: AC: 3 ECTS: 3

Principles of reinforced concrete and steel load-bearing systems, design principles of trusses (column, beam), reinforced concrete and steel slab systems, building service systems



(horizontal and vertical distributions of mechanical and electrical equipment), lectures on system selection in structural problems such as wide span, console, research assignments, assignments and studio works for preparing detail drawings.

#### **ARCH 300 Summer Practice II (Office)**

Prerequisite: None

Credit: AC: 0 ECTS: 5

This summer practice aims at introducing students of architecture to the environment of an architectural office, observing and participating in project development, relations of projects and implementation and various office procedures.

# 4<sup>TH</sup> YEAR FALL SEMESTER

### ARCH 401 Architectural Design V

Prerequisite: to be successful - ARCH 302

Credit: AC: 5 ECTS: 10

This course aims to explore and develop architectural design methodology applied to situations of various size, scale, and complexity. In this course the students of architecture bring together all their architectural tools learned in the previous years onto coherent design work founded in the current theoretical discourse. In this studio students are guided to hold detailed analysis on building, close surrounding and urban context levels, in order to recognize and interpret the building in terms its features and values as well as problems associated with it.

### **ARCH 441 Principles of Conservation and Historic Buildings**

Prerequisite: None

Credit: AC: 3 ECTS: 5

The course of Principles of Conservation and Historic Buildings aims on improving the theoretical base of thoughts of historic buildings, conservation methodologies and techniques. The course will focus on several topics: single building conservation and historical environment conservation; description of immovable nature and culture estates; conservation standards; pre-restoration operations; preparation of restoration projects; restoration techniques; regulations and organizations for conservation of cultural heritage.

### 4<sup>TH</sup> YEAR SPRING SEMESTER

### **ARCH 402** Architectural Design VI

Prerequisite: to be successful – ARCH 401 Credit: AC: 5 ECTS: 10

A final studio course in which students are expected to develop their designs independently. They are expected to work from macro to micro scales and with special emphasis on the individual interest areas. Each student is to demonstrate individually a performance that he/she has attained the professional standard required to practice within the rich context of the architectural discipline.

#### **ARCH 472 Professional Practice**



Prerequisite: None

Credit: AC: 3 ECTS: 5

Teaching students the duties and responsibilities of architects about the construction sector which consists job opportunities of architects; duties and responsibilities towards the employer, the chamber of architects, the building inspection firm and the municipality; company establishment legislation and company management.

# **ELECTIVE COURSES**

# **ARCH 351 Construction Management**

Prerequisite: None

Credit: AC: 3 ECTS: 3

Project, project management, project processes, construction activities, project delivery systems, construction contract types, time, cost, quality, quantities, budget estimation

### **ARCH 411 Analysis of Investment**

Prerequisite: None Credit: AC: 3 ECTS: 3

Time value of money, cash flow charts, interest types and calculations, payback period method, rate of return method, net present value method, cost-effectiveness analysis, internal rate of return method, break-even analysis, market methods

### **ARCH 413 Architecture as Power and Politics**

Prerequisite: None

Credit: AC: 3 ECTS: 3

Throughout history and across the world, architecture has been used as a propagandistic tool to intentionally communicate ideas of power and politics, creating a social narrative that revolves around physical and theoretical construction and destruction. Architecture has a way of influencing viewers as well as being influenced by the political aspirations of those intent on using design to prove a point. Often, the same location is used during multiple historical epochs for the express purpose of illustrating ideas of politics and power.

# ARCH 421 Introduction to Site Analysis and Conceptual Diagrams

Prerequisite: None

Credit: AC: 3 ECTS: 3

Contextual analysis, the study of project property, sound decisions about optimum site utilization, best on site arrangements of occupants interior and exterior activities and spaces, and most effective ways to respect and capitalize upon site assets.

### ARCH 425 Bauhaus

Prerequisite: None

Credit: AC: 3 ECTS: 3

Bauhaus legacies (at Black Mountain College, the Ulm School of Design, the New Bauhaus Chicago, Yale and Harvard, and in the Situationists New Babylon project). The course will include: the work of the architects Walter Gropius, Hannes Meyer, Mies van der Rohe and Lilli Reich; the art and design (textiles, metal work, prints, photographs, typography,



paintings, sculpture, etc.) of Paul Klee, Wassily Kandinsky, Lyonel Feininger, Gunta Stözl, Moholy-Nagy, Herbert Bayer, Joseph Albers, and Oskar Schlemmer; as well as the writings of important Weimar writers and theorists, such as Remarque, Benjamin, Lukács, and Kracauer.

### ARCH 429 Social Media Spaces

Prerequisite: None Credit: AC: 3 ECTS: 3 This course intends to analyze social media as a public space and discuss public communication in this new public space.

# ARCH 435 Theory of Subjectivity in Architecture

Prerequisite: None

Credit: AC: 3 ECTS: 3

The aim of the course is to provide students efficient methods and tools for developing a critical analysis of the architectural design process, with particular attention on the following matters: Theory of the subject and Evolution of the Architectural Theories. During the course, particular attention will be payed on the analyses of architectural and space perception.

# ARCH 437 Industrial Kitchen and Restaurant Design

Prerequisite: None

Credit: AC: 3 ECTS: 3

Kitchen safety, kitchen equipment, kitchen and restaurant design, furniture and fixtures, safety and sanitation, storage and ventilation.

https://ects.ahep.edu.tr/en