## Department of Architecture and Design

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Associate Professors: Arbid, George; Harb, Mona; Maasri, Zeina; Sadek, Walid;

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Lecturers: Alamuddin, Hana; Arida, Sara-Jane; Assi, Naji; Bakhos, Walid;

Boyadjian, Rafi; Dajani, Tarek; Debs, Habib;

El-Hage Boutros, Pierre; Feschfesch, Antoine; Freiji, Mayda; Haddad, Rana; Hamdan, Fadi; Jaber, Raghda; Jabr, Abdulhalim; Jamal, Sany; Kaloutsian, Paul; Kanaan, Joy; Karanouh, Rena; Khoury, Abir; Mallat, Bernard; Nader, Karim; Najm, Wagih; Nasrallah, Maha; Samara, Rana; Shihab-Eldin, Luma;

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Instructors: Abboud, Rania; Aramouny, Carla; Baki, Fadi; Bekdache, Nadine;

El-Abed, Zeina; Gharbieh, Ahmad; Hachem, Pascal; Imam, Hatem;

Kahwagi, Bassam; Kassab, Sandra; Khoury, Roula; Maasri, Ghassan; Richani, Sandra; Sinno, Tarik;

Youssef, Shawki: Zahreddine, Hassan

Assistant Instructors: Captan, Lara; Idriss, Rola

The Department of Architecture and Design offers programs at both the undergraduate and graduate levels. The undergraduate level programs are in architecture and graphic design. The architecture program leads to the professional degree of Bachelor of Architecture (BArch). The graphic design program leads to the professional degree of Bachelor of Fine Arts in Graphic Design (BFA).

# Architecture Mission Statement

The program of architecture is committed to playing a leading role in architecture practice both in Lebanon and in the region through a critical discourse of architectural inquiry. It strives to maintain a prominent and active community searching for continuous excellence in teaching, research, and professional practice. Central to the curriculum, design is addressed as a research-oriented activity that engages critical thinking, that aims to bridge theory and practice, and that responds to the responsibilities of an architect towards the public. The goal of the program is to enable a supportive, diverse and professional environment that fosters the creative development of all faculty and students.

## **Program Description**

The architecture program comprises a total of 174 credit hours normally taken over five years. The curriculum is structured as follows: 1) Two foundation years, first and second, with core requirements in design, technical, and history courses which offer students basic skills and knowledge in design and related areas. 2) Two advanced years, third and fourth, with core requirements in advanced design, technical, history and theory courses, reinforced by the distribution electives. The design studios at this level are thematic vertical studios. 3) Final year, fifth year, with a one-year design thesis and project and advanced electives.

The degree requirements in architecture consist of the following:

- 129 credit hours of mandatory core courses
- 18 credit hours of approved ArD/FEA field electives
  - 3 credit hours in Category A: Representation
  - 6 credit hours in Category B: History and Theory
  - 9 credit hours in Category C: Technology, Engineering, and Professional Practice
- 6 credit hours of free electives in consultation with the academic adviser

To meet the General Education Requirements of AUB

- 6 credit hours of English including ENGL 206
- 3 credit hours of Arabic as per placement test
- 6 credit hours of approved electives in humanities
- 3 credit hours of an approved elective in the social sciences
- 3 credit hours of an approved elective in the natural sciences

# Curriculum for the Degree of Bachelor of Architecture

#### First Year

Fall Semeste	r		Credits
ARCH	100	Basic Design	4
ARCH	111	Technical Drawing	4
ARCH	121	History of Ancient Art and Architecture: From Caves to Catacombs	3
ARCH	151	Statics and Mechanics of Solids	4
ENGL	206 (or English as required)	Technical English	3
			Total 18

Spring Ser	Credits		
ARCH	101	Architecture Design I	7
ARCH	112	Descriptive Drawing	3

ARCH	122	History of Medieval Art and Architecture	3
ARCH	152	Analysis and Design of Structures I	4
			Total 17

## Second Year

Summer	Summer Semester				
ARCH	241	Surveying Regional Architecture	g		
Fall Sem	ester		Credits		
ARCH	202	Architecture Design II	7		
ARCH	223	History of Post-Medieval Art and Architecture	3		
ARCH	242	Building Construction I	3		
ARCH	253	Analysis and Design of Structures II	4		
			Total 17		
Spring Se	emester		Credits		
ARCH	203	Architecture Design III	7		
A DCII	22/	History of Madara Art and Architectures	2		

Spring Se	mester		Credits
ARCH	203	Architecture Design III	7
ARCH	224	History of Modern Art and Architecture: 1760-1945	3
ARCH	243	Building Construction II	3
ARCH	313	Computer Aided Design	3
English			3
			Total 19

#### Third Year

Summer	Semester	Credits			
ARCH	373	Training in CAD			
Fall Semo	ester		Credits		
ARCH	304	Vertical Studio I	7		
ARCH	331	Urbanism	3		
ARCH	261	Building Services	4		
ENMG	502	Construction Management	3		
			Total 17		

Spring Semester			Credits
ARCH	305	Vertical Studio II	7
ARCH	325	Contemporary Architecture	3
2 Field/Fre	2 Field/Free Electives or General Education Requirements		
			Total 16

### Fourth Year

Summer	Semester		Credits
ARCH	474	Training in Execution Drawings	0 b.*
Fall Semo	ester		Credits
ARCH	406	Vertical Studio III	7
3 Field/Fre	ee Electives or (	General Education Requirements	9
			Total 16
Spring Se	emester		Credits
ARCH	407	Vertical Studio IV	7
3 Field/Fre	ee Electives or (	General Education Requirements	9
			Total 16
Summer	Semester		Credits
ARCH	575	Approved Experience	1 b.*
Fall Semo	ester		Credits
ARCH	508	Final Project Design and Research I	7
3 Field/Fre	ee Electives or (	General Education Requirements	9
			Total 16
Spring Se	emester		Credits
ARCH	509	Final Project Design and Research II	7
	2 Field/Free Electives or General Education Requirements		
2 Field/Fre	ee Electives or (	General Education Requirements	6

## **Course Descriptions**

## **Mandatory Core Courses**

Each of the following courses is required for the degree in architecture. Students should pay careful attention to the prerequisite structure, which must be observed. There is a grade average requirement for: ARCH 202, 304, 406, and 508; an average of 70 must be attained in the two preceding design courses in each case. Non-majors must secure the approval of the department and the instructor concerned to enroll in any of the courses listed below.

#### ARCH 100 Basic Design

4 cr.

Basic Design is an introductory studio course that provides an initial practical involvement in issues pertaining to design and architecture. The student is introduced and called upon to engage in thinking through applied practices about various questions concerning pictorial space, urban space, representation, physical gesture, objects and structures of organization. The aim of the projects is to expose students to basic design principles and train them in foundation studio skills.

#### ARCH 101 Architecture Design I

7 cr.

A design studio focused on the development of analytical and technical skills for perceiving, understanding, and manipulating spatial definitions and relationships. *Prerequisite: ARCH 100*.

#### ARCH 111 Technical Drawing

4 cr.

This is a course in descriptive geometry and graphic communication in architecture. Students learn to use drawing tools. They acquire techniques of representation of 3D and space on 2D surfaces, including orthogonal (plans, sections, and elevations), paraline (axonometrics and isometrics), and perspective drawings. Applications cover construction of shades and shadows.

#### ARCH 112 Descriptive Drawing

3 cr

This studio course is an introduction to the visual representation of the built environment. Students learn the skills of pictorial conventions and are introduced to the historical specificity and theoretical assumptions that underlie them.

#### ARCH 121 History of Ancient Art and Architecture: From Caves to Catacombs

3 cr.

The first course in the History of Art and Architecture sequence surveys the origins and development of architecture, artifacts, and urbanism from prehistoric times to the end of the third century CE. We question meanings of the term art through objects associated with the activities of daily life and with the practices of kingship and religion, especially beliefs and rituals surrounding death and burial. While considering formal development, we also look at artifacts in their cultural context, relating them to myth, literature, and the development of technology. Local field trips are an important component of the class.

#### ARCH 122 History of Medieval Art and Architecture

3 cr.

This course is the second in the History of Art and Architecture sequence required for students in Architecture and Graphic Design. It covers medieval art and architecture from the fourth to the fourteenth centuries, including Byzantine, Ummayyad, Abbasid, Fatimid, Romanesque, Gothic, Ayyubid, and Mamluk art. The course is an analytic study of major developments, artists, and monuments. It emphasizes processes of cultural productions, their ideological framework, and socio-political significance. *Prerequisite: ARCH 121 or consent of instructor*.

#### ARCH 151 Statics and Mechanics of Solids

4 cr.

An introduction to vector forces and moments; equilibrium of rigid bodies in 2-D and 3-D; free body diagrams; frames and machines; centers of gravity and moments of inertia; design of trusses, beams with shear and moment diagrams; introduction to material properties; stresses, strains, and their relationship; normal, shearing stresses. The course also provides an introduction to indeterminate structures.

#### ARCH 152 Analysis and Design of Structures I

4 cr.

Review of normal and shearing stresses and combined stresses; an introduction to column design and buckling; cable design; physical properties of various materials used in construction: timber, steel, aluminum, copper, and others. Deformation of structural elements under loads using moment area and conjugate beam method. Indeterminate structures by approximate methods & Moment Distribution method; design and selection of the structural elements according to loads applied with practical assignments: selection of materials and pre-dimensioning the structure elements. *Prerequisite: ARCH 151*.

#### ARCH 202 Architecture Design II

7 cr.

This design studio has emphasis on structural concepts and construction materials as a major design determinant; manipulation of architectural elements and space; and observation of freehand and technical representation. *Prerequisites: ARCH 101 and a combined grade average of 70 in ARCH 100 and ARCH 101*.

#### ARCH 203 Architecture Design III

7 cr.

This design studio introduces projects that deal with complex architectural programs and the development of conceptualization related to developing design work. This develops the student's response to design challenges through projects that deal with different environments, scales, and venues (level and sloping sites, new construction, renovation, urban, and rural). The studio stresses a variety of representation tools (sketching, collage, texts, 2D and 3D drawings, models) and emphasizes architectural representation in plan, section, and elevation. *Prerequisite: ARCH 202*.

#### ARCH 223 History of Post-Medieval Art and Architecture

3 cr.

The course is a study of art and architecture during the post-medieval period with a special emphasis on the fifteenth and sixteenth century Mediterranean world. It is the third in the history of art and architecture sequence required for students in architecture and graphic design. The post-Medieval period covered by the course includes the Italian Renaissance and the Ottoman Empire with emphasis on cultural encounters and exchange between East and West *Prerequisites: ARCH 121, ARCH 122 or consent of instructor.* 

#### ARCH 224 History of Modern Art and Architecture: 1760–1945

3 cr.

The last course of the History of Art and Architecture sequence surveys the development of Western art and architecture from 1760 to 1945. Thinking beyond the established canon, the course critically addresses the political, aesthetic, institutional, and cultural forces that have contributed to shaping this canon. Problems we encounter when we acknowledge that art is a cultural product include the uneasy fit of style-period categories or the isms of art, gender, historical definitions of the avantgarde, the consumption and display of art; and the status of the artist in society. *Prerequisites: ARCH 121, ARCH 122 and ARCH 223 or consent of instructor.* 

#### ARCH 241 Surveying Regional Architecture

9 cr.

The course is organized in two successive formats. The first introduces the students to topographic mapping and route surveying. The second involves the tools and methods of architectural surveying. Fieldwork is applied to surveying, documentation, and the analysis of factors contributing to the distinctive aspects of Lebanese regional architecture: vernacular, traditional, and modern. *Prerequisite: ARCH 111*.

#### ARCH 242 Building Construction I

3 cr.

A course on the response of building envelopes to surrounding environmental factors; covering in detail the components of the envelope: floors, walls, doors, windows, and roofs of all types. This course is also an introduction to construction detailing.

#### ARCH 243 Building Construction II

3 cr.

A combined lecture and studio course that examines recent building technologies, materials, finishing work and materials, and the methods, contents, and presentation of professional construction documents including execution drawings, details, and schedules. *Prerequisite: ARCH 242*.

#### ARCH 253 Analysis and Design of Structures II

4 cr.

Concrete mechanical properties: design of continuous beams in flexure and in shear, columns, different types of footings, basement walls, retaining walls, structural walls, one way solid slab, one way ribbed slab, introduction to two way slabs, staircase; design of a multi-story building with a detailed project. *Prerequisite: ARCH 152*.

#### ARCH 261 Building Services

4 cr.

The objectives of the course are to introduce the art, science, and practice of building services engineering to the future architect in all aspects of design, installation, and maintenance associated with building services. Included are: air-conditioning, heating and ventilating, water services, sanitary works, energy management systems, solar collectors, electrical distribution systems, electrical equipment, materials, lighting, and lifts.

#### ARCH 304 Vertical Design Studio I

7 cr.

This is one of four advanced level design studios taken by third and fourth year students together. Each is devoted to a specific theme and methodology. Collectively, the vertical studios expose the student to a diversity of architectural issues, techniques and approaches to architecture design. Topics for thematic advanced design studios are posted at the beginning of the semester. Third- and fourth-year students select from the studios offered. *Prerequisites: ARCH 203 and a combined grade average of 70 in ARCH 202 and ARCH 203*.

#### ARCH 305 Vertical Design Studio II

7 cr.

See description of ARCH 304. Prerequisite: ARCH 203.

#### ARCH 313 Computer Aided Design

3 cr.

An introduction to the CAD world and its 2D implementation in the architectural field. Students learn the tools and techniques to translate their hand drawn design sketches into digital format, from basic conceptual diagrams to fully loaded architectural drawings, meeting the high standards of design-firm expectations.

#### ARCH 325 Contemporary Architecture

3 cr.

The contemporary condition of architecture was shaped by a series of events and movements that followed the rise of Modernism. As a logical continuation of the History of Art and Architecture sequence, this class surveys the main architectural movements from 1945 on in order to better understand the state of architecture today and as a way for students to shape enlightened opinions about contemporary practices and discourses. Through lecture classes, critical readings and seminar sessions, students are encouraged to voice their thoughts and opinions on reviewed projects or discourses and are invited to explore a particular area of interest that is relevant to current and emerging practices. *Prerequisite: ARCH 224*.

#### ARCH 331 Urbanism

3 cr.

An introductory course to contemporary debates in the field of urban studies within the social sciences and their implications for the practices of architecture, urban design and urban planning. Special emphasis is placed on understanding processes of place-making (that is looking at the forces behind the production of space) and the influence of place on its dwellers (that is seeing how places/ spaces influence/dictate how people act). The relevance of these theoretical debates to the local/ regional geographic context is closely investigated. *Prerequisite: ARCH 224*.

#### ARCH 373 Training in CAD

0 b.

A non-credit training course in which students work in local architectural offices on CAD applications. Reports on work completed are evaluated for level of involvement and quality of achievement.

#### ARCH 406 Vertical Design Studio III

7 cr.

See description of ARCH 304. Prerequisites: ARCH 305 and a combined grade average of 70 in ARCH 304 and ARCH 305.

#### ARCH 407 Vertical Design Studio IV

7 cr.

See description of ARCH 304. Prerequisite: ARCH 203.

#### ARCH 474 Training in Execution Drawings

0 b.

A non-credit course that consists of professional training in architectural offices, where students develop their knowledge of execution drawings.

#### ARCH 508 Final Project Design and Research I

7 cr.

A course conceived within a research-oriented studio/workshop model in which students are expected to critically explore architectural issues of personal interest and of general importance to the discipline, and to present their findings in a research report and preliminary design proposal. *Prerequisites: Four vertical design studios and a combined grade average of 70 in ARCH 406 and ARCH 407.* 

#### ARCH 509 Final Project Design and Research II

7 cr.

This is the second half of a year-long design thesis and the culmination of the design studio training. Students integrate and synthesize acquired knowledge and skills, and develop both the theoretical/critical and practical components of the design thesis and project proposed in ARCH 508. *Prerequisite:* ARCH 508.

#### ARCH 575 Approved Experience

1 b.

This is an eight-week professional training course at an architectural design office.

#### **Elective Courses**

The elective courses in the architecture program, offered within the Department of Architecture and Design are distributed in three main categories and are subject to change as new electives are introduced every year.

Category A: Representation (01)

Category B: History (02) and Theory (03)

Category C: Technology (04), Engineering (05) and Professional Practice (06)

## Category A: Representation

#### ARCH 010 Photography

3 cr.

This course aims at providing architecture students with a comprehensive understanding of the basics of black and white and color photography, its techniques, and aesthetics. Students learn how to use their cameras and light meters and are taught, through hands-on practice, the fundamentals needed in traditional black and white printing in the darkroom. The course includes slide lectures and discussions around the works of classic masters and contemporary experts of the medium. field trips, as well as presentations by well-established photographers specializing in architectural photography.

#### ARCH 012 The Black Box

3 cr.

The Black Box is a workshop and seminar open to architecture, graphic design and other students. Class meets once a week. Metaphorically, the black box stands for a hiding device that creates a feeling of curiosity and triggers imagination. This seminar is an exploration, interaction and experimentation with the concept of the black box through the three sub-themes of Desire, Imagination and the Unseen. Students are invited to respond to contemporary artistic works (cinema, architecture, literature) as well as to present their own through the media of photography, script-writing and projection. Prerequisite: Advanced standing.

#### Digital Tools: 3D Studio Max

3 cr.

With the beginning of the millennium traces of traditional drawing in architecture have been replaced by digitized layouts. With computer software exponentially evolving, a new vision of architecture is now possible. From schematic design, visual construction, to final renderings, software tools have proven to be of the utmost efficiency, 3DMax is one of the best of these. Combined with a simple presentation tool such as MS PowerPoint it creates a powerful impact. This course is essentially aimed toward today's architecture students, providing them with everything needed to complete the construction, rendering, and presentation of architectural ideas.

For Graphic Design representation courses refer to Graphic Design section.

## Category B: History and Theory

#### ARCH 020 Beirut Modern

3 cr.

The course investigates modern architecture in Lebanon, mainly in the 1950s and 1960s, shedding light on a vibrant period that produced a distinctive local version of modernism. The course covers aspects such as architectural education, the organization of the profession, patronage, competitions, collaborations, and the various meanings given to modernity and tradition.

#### ARCH 021 The Imperial Image

3 cr.

Images are constants, but the ideas they legitimize take on different forms and values. This seminar explores the relationship between the visual arts and the ideologies of empire, looking at art produced in, and relating to, the sites of colonial, imperial, and mandatory control that comprised the European colonial project from the 16th to the mid-20th centuries.

ARCH 022 Building the Colonies: Colonialism, Imperialism, and Local Modernities

Colonialism and imperialism can be interpreted as part of larger ideological and sociopolitical systems that continue to inform changing cultural values today. This seminar uses sites of colonial urbanism to investigate ways that spatial organization produces historical knowledge. We consider alterations made to pre-existing cities as well as new city plans, both built and projected, in the Americas, in Asia, and around the Mediterranean Rim.

#### ARCH 023 From Urban Design to Landscape Urbanism

3 cr.

The distinction between urban, suburban and rural is increasingly blurred. New patterns of physical urbanization and growing environmental concerns are challenging the conventional approach of urban design in thinking about and shaping city space. Emerging disciplines such as landscape design and landscape urbanism are providing alternative ways of conceptualization that stress ecology over morphology, network surface over urban form, and the confluence of architecture, landscape, city and infrastructure. This course explores the changing conception of city space examining the shifts in urban design theory and practice. The course will appeal to students in architecture, landscape architecture and urbanism who are interested in crossing the boundaries between disciplines and exploring new potentialities in design thinking.

#### ARCH 024 Hybrid Beirut: Morphogenesis of the Contemporary City

3 cr.

Subjected to colonialism, Beirut was able to develop its own response to early modernization through the assimilation and domestication of Western urban and architectural trends. The resulting cultural hybridity and townscape diversity is understood by exploring the transitional years from a Medieval Arab-Islamic town in the 1840s to a showcase of the French Mandate in the 1920s and 30s. This course is an attempt to read the contemporary city through its recent colonial past and to trace the continuity and change in its social, economic and cultural conditions as mirrored in building typologies and spatial urban structure.

#### ARCH 025 House and Home: Histories of Domesticity

3 cr.

This seminar/practicum takes two contrasting but complementary approaches, historical understanding and phenomenological experience, to explore definitions of what we mean by the word home. Both planned and informal domestic architecture in the region are investigated as central case studies.

#### ARCH 026 The Cities of Delhi: Urban Form and the Transmission of Meaning 3 cr.

New Delhi, capital of the Republic of India, encompasses the vestiges of many older cities, built over a thousand-year period by disparate cultural groups. In this course, case histories of buildings and neighborhoods are used as a way of reading the processes of hybridization that result from the overlay of city upon city.

#### ARCH 027 Museum/Store

3 cr.

This course will offer a critique of the role and practices of the Museum of Modern Art (MoMA) in New York City at a time when the institution is seeking to redefine itself. MoMA, the first major institutional collector of 20th-Century art, now has what is arguably the most important concentration of modern painting and sculpture, film and media art in the world. This will be used as a focal point and a case study for exploring the evolution and history of museum architecture and museum practices as they change in the emerging 21st Century. Within a seminar format, students will explore the histories of a range of topics that relate to the role of museums today.

#### ARCH 029 A History of the Artist

3 cr.

This course offers an historical and critical reading of the category artist as it has been written and deployed in biographies, films, and art theory. Through a close analysis of four different historical moments in Western art, the course traces the development of the social persona of the artist and its refraction with artistic practice.

#### ARCH 030 Writing the Manifesto

3 cr.

Writing the manifesto is a workshop and seminar open to architecture, graphic design and other students. Class meets once a week. If we want the practice of design to be engaged socially and politically, it needs to part from the superficial or the formal and stem from a strong passionate attitude. This course aims at developing this attitude through reading and interacting with engaged authors and through developing a manifesto piece. In this process, every student will write his/her own manifesto and present it to others. *Prerequisite: Advanced standing*.

#### ARCH 033 Art and Interpretation

3 cr.

This theory seminar is designed to introduce students to a range of methods of interpretation of works of arts grounded in the discipline of art history or drawn from related fields such as analytic aesthetics, hermeneutics and phenomenology. The theoretical models include iconography, post-structuralist semiotics, psychoanalysis, feminist, and post-colonial theory.

ARCH 034 Montage: Cinema and the Making, Un-Making and Re-Making of Space 3 cr. The course will investigate cinema's unique power of montage, which creates a multi-subjective space and time that may not exist in objective reality. Students will be encouraged to develop a critical understanding of cinema through writing, photographic storyboards, and artistically challenging video projects.

#### ARCH 035 Geographies of Exclusion

3 cr.

This course investigates the idea of geographies of exclusion through a multi-disciplinary inquiry which locates space and spatial production at its center. It cross-thinks issues of exclusion across cities in the Global North and the Global South. Gender, class, religion, and race are the main fault lines that we will use to study how certain populations in our cities are left "outside" (through gated communities, "mean" streets, security barriers, segregated parks, etc.), or kept "inside" (refugees in camps, locked-in domestic workers, prisoners, etc.).

#### ARCH 037 Sociology of Cultural Production

3 cr.

An introduction to the basic terminology used in all sociological analysis of cultural phenomena combined with the relation between art and reality (society, politics and history, myth, and ideology). This course then investigates the role and power of cinema and initiates a comparative analysis of media concerning key issues such as nation, identity, race, and "the other."

#### ARCH 039 The Politics of Building

3 cr.

This course examines how architecture and urban design redistribute political power in the built environment and how their narratives incorporate and represent political ideas that condition and shape individual and collective experiences in/of the city and society. The course highlights the spatiality of politics and how the urban is a political (and economic) process of spatial production. Students learn: to define politics and political power as analytical categories; to identify the political features determining the building process, as well as the spatial implications of political choices across contexts; to understand how politics determine their roles as professional architects and designers and how to position themselves accordingly.

## Category C: Technology, Engineering, and Professional Practice Technology

#### ARCH 040 "Making It": Models and Prototypes of Complex Structures

3 cr.

Design and technology studies in schools of architecture are based on the making of things, how they perform in the environment, the experience of the results, and its cognitive interpretation. The scientific knowledge and technical expertise available for architecture are extensive and their rate of change is substantial. The course seeks to develop the ability to learn how to learn, a vital necessity for innovation. The teaching focus is on craftsmanship, innovation, conceptual and lateral thinking, new technologies, construction, interdisciplinary work, and collaboration with industries.

#### ARCH 045 Building Systems Technology

3 cr.

This course provides an introduction to building systems technology. The course will focus mainly on the behavior of buildings as systems, and where possible will provide additional material for the design of buildings against extreme conditions such as fires, explosions, rare earthquakes and wind. All the above concepts will be introduced with minimum (if any) recourse to mathematical equations, as emphasis will be placed on understanding the behavior of different structural systems under various loading scenarios.

#### **Engineering**

(Refer to the Engineering Management Program section)

#### **Professional Practice**

#### ARCH 060 Beyond Green: Seeking Sustainability in the Environment

3 cr.

The past decade has seen an incredible evolution of architecture and design adapting to the issue of climate change. Greening ourselves and the cities we live in has been widely discussed in the media, while legitimized in regional building codes and master plans. The course structure will guide students to expose the underlying processes, multi-scalar systems, and diverse forces of sociocultural and political flows that impact the lens of sustainable design.

#### ARCH 061 Architectural Programming

3 cr.

The course deals with Architectural Programming as a design process that does not precede design, but works with it. The intent is to delineate a design methodology based on academic research and practical knowledge to synthesize and translate a project brief – client requirements, legal regulations, spatial needs etc – to design strategies and solutions, through the collaboration of multiple participants and decision-makers. The course is envisioned to be given in close collaboration with design studios to strengthen the bridge between theory and practice.

#### ARCH 065 Climate Responsive Design

3 cr.

This course addresses the subject of climate-responsive architecture. The course's content starts with an introduction to the broad issue of sustainability, continues with the analysis of vernacular examples in architecture and moves on to develop the subjects of climate, people and buildings. The course consists of a series of lectures and short design applications that will enhance the students' understanding of the subject matter.

#### ARCH 068 Law and the Built Environment

3 cr.

A course exploring the relations between the rules that govern the production of the built environment, building practices, and the shape of the city. Rules include the complex set of state legislated regulations (e.g. building law, zoning regulations, urban planning law) as well as socially sanctioned norms (e.g. privacy regulations). Investigated building practices are mostly those of the professional architectural practice and should inform the future role of the students as designers. The course is based on a critical approach to the understanding of law, how it is legislated, how it is actualized, how it intersects with other norms in the context where it is implemented, and how it affects building practices.

## **Graphic Design**

## Mission Statement

The Graphic Design Program answers to the developments and needs of Lebanon and the region as it strives to meet globally required proficiency. The curriculum focuses on a solid training in the theoretical, practical and technical aspects of Graphic Design. It is the goal of the program to help students to perceive and adapt to the changing demands of culture and therefore to the continuous change in the design field. Students develop an intellectual background, critical thinking and contribute to the continuum of aesthetic and technological innovations by generating ideas and solutions to a wide range of design problems. The program is committed to its involvement in the Arab world: its multitude of languages and cultures. It is the Program's mission to address these issues in a challenging creative teaching and learning environment.

## **Program Description**

The Graphic Design Program is comprised of a total of 139 credit hours normally taken over four years. The curriculum is structured as follows: 1) Two foundation years, first and second, with core requirements in design, typography, representation techniques, digital media, history and theory courses which offer students basic skills and knowledge in design and related areas. 2) One advanced year, third year, with core requirements in advanced design, digital media, history and theory courses, reinforced by the field/free electives and general education requirements. 3) Final year, fourth year, with a one-year design thesis and advanced electives.

The degree requirements in Graphic Design consist of the following:

- 97 credit hours of mandatory core courses
- 12 credit hours of approved ArD/FEA field electives
- 3 credit hours in Category A: Representation
- 6 credit hours in Category B: History, theory, and methodology
- 3 credit hours in Category C: Digital media, typography, and professional practice
- 3 credit hours of free electives in consultation with the academic adviser

#### To meet the AUB General Education Requirements:

- 6 credit hours of approved electives in the area of humanities
- 6 credit hours of approved electives in the area of natural sciences
- 3 credit hours of approved electives in the area of quantitative thought
- 3 credit hours of approved electives in the area of social sciences
- 6 credit hours of English, one of which should be English 204
- 3 credit hours in Arabic, as per placement test

# Curriculum for the Degree of Bachelor of Fine Arts in Graphic Design

#### First Year

Fall Semes	ter		Credits
ARCH	100	Basic Design	4
GRDS	111	Drawing	3
ARCH	121	History of Ancient Art and Architecture: From Caves to Catacombs	3
GRDS	112	Color	3
ENGL	204 (or English as required)	Advanced Academic English	3

Total 16

Spring Se	Spring Semester			
GRDS	101	Graphic Design I	6	
ARCH	122	History of Medieval Art and Architecture	3	
GRDS	214	Illustration	3	
GRDS	141	Computer Graphic I	3	
		Field / Free Elective or General Education Requirement	3	
			Total 18	

#### **Second Year**

Summer Semester			Credits
GRDS	113	Photography	3
		2 Field/Free Electives or General Education	(2 x 3 cr.) 6
		Requirements	

Total 9

Fall Seme	ster		Credits
GRDS	202	Graphic Design II	6
ARCH	223	History of Post-Medieval Art and Architecture	3
GRDS	251	Typography I	3
GRDS	242	Computer Graphic II	3
		Field/Free Elective or General Education	3
		Requirement	
			Total 18

Spring Semester			Credits
GRDS	203	Graphic Design III	6
ARCH	224	History of Modern Art and Architecture: 1760 –1945	3
GRDS	252	Typography II	3
GRDS	231	Introduction to Visual Theory	3
			Total 15

## Third Year

Summer Semester	Credits
2 Field/Free Electives or General Education Requirements	(2 x 3 cr.) 6
	Total 6

Fall Semester			Credits
GRDS	304	Graphic Design IV	6
GRDS	325	History of Graphic Design	3
GRDS	361	Professional Practice	3
		1 Field/Free Elective	3

Total 15

Spring Semester		Credits	
GRDS	305	Graphic Design V	6
GRDS	343	Motion Graphics	3
		2 Field/Free Electives	(2 x 3 cr.) 6
			Total 15

### **Fourth Year**

emester		Credit
462	Approved Experience	1 b.*
ster		Credit
406	Final Project Design and Research I	6
344	Interactive Media Design	3
	2 Field/Free Electives	(2 x 3 cr.) 6
		Total 15
	462 Ster 406	462 Approved Experience  ster  406 Final Project Design and Research I 344 Interactive Media Design

Spring Semester			Credits
GRDS	407	Final Project Design and Research II	6
		2 Field/Free Electives	(2 x 3 cr.) 6
			Total 12

## **Course Descriptions**

## **Mandatory Core Courses**

#### GRDS 101 Graphic Design I

6 cr.

This is an introductory studio on graphic design methods and processes where fundamentals of visual communication are addressed. The studio starts with basic investigations in the development of visual form, and gradually moves on to cover more complex components of graphic design dealing with the construction of meaningful visual messages and the organization of information. *Prerequisite: ARCH 100.* 

#### GRDS 111 Drawing

3 cr.

This studio course is an introduction to visual representation. Students learn drawing skills and pictorial conventions, and consider the historical specificity and contemporary relevance of such skills and conventions.

GRDS 112 Color 3 cr.

A study of the dynamic interaction of color and its applications for designers and artists. This course includes an introduction to the physics of color, color composition and the three dimensions of color, hue, value, and chroma, as well as the color wheel.

#### GRDS 113 Photography

3 cr.

A course aimed at providing graphic design students with a thorough understanding of the basic techniques and aesthetics of both black and white and color photography, through hands-on assignments and darkroom practice.

#### GRDS 141 Computer Graphics I

3 cr.

This course is divided into three sections. The first introduces students to the Macintosh platform and the MacOS, covering all aspects such as file management, activating fonts, accessing network, and printing. The second section deals with the basic features of Adobe Illustrator ®, the industry-standard and most professional vector-based illustration software; the last part covers the basic features of Adobe Photoshop®, where students learn basic image creation and manipulation.

#### GRDS 202 Graphic Design II

6 cr.

This studio focuses on the development of corporate identity through investigation of abstraction and symbolic representation; logo design; and visual identity systems and their basic applications using various modes of image making and typography. *Prerequisites: GRDS 101 and a combined grade average of 70 in ARCH 100 and GRDS 101*.

#### GRDS 203 Graphic Design III

6 cr.

This studio addresses graphic design as a cultural practice. It focuses on processes of visual communication where issues of meaning, production and exchange are emphasized and critically examined in their relation to particular social contexts and localities. Methodologies of arriving at meaningful graphic solutions—image-text relationships, visual narratives, typography, and complex information organization— are explored through diverse theme-based projects and printed formats of public dissemination. *Prerequisite: GRDS 202*.

#### GRDS 242 Computer Graphics II

3 cr.

This course is the second in the series following the first computer course (GRDS 212). It is also divided into three sections. The first deals with the advanced features of Adobe Illustrator <sup>®</sup>. Advanced Adobe Photoshop <sup>®</sup> constitutes the second section of the semester, where students learn advanced image creation and editing techniques for print and web applications. The last section covers Adobe InDesign <sup>®</sup>, the professional electronic desktop publishing software for the creation of any form of publication, from simple single page to complex multicolor documents. In addition, cross-compatibility issues between the above-mentioned software are tackled at the end of the semester. *Prerequisite: GRDS 141*.

#### GRDS 251 Typography I

3 cr.

In this course students develop a clear understanding of the usage of typography in all its forms. They explore the different components of type, the way it is used, when and where, procedures and methods. The purpose is for the student to develop sensitivity toward type and to deal with it as a form versus a way to get a message read.

#### GRDS 252 Typography II

3 cr.

In this course students address text. New components are investigated: texture, direction, flow, space. Text is formed from paragraphs made of words made of letters. Text is used for information, for support, and sometimes as an entity. Projects are distributed throughout the semester covering all these aspects. *Prerequisite: GRDS 251*.

#### GRDS 214 Illustration

3 cr.

This course introduces students to illustration techniques and styles with the aim of strengthening their representation and visualizing skills to enrich the graphic design process and its outcomes. Assignments cover various themes while exploring a wide range of media.

#### GRDS 231 Introduction to Visual Theory

3 cr.

An introduction to the various debates concerning visual representation aimed towards an investigation of the visual as a social practice and as part of an aesthetic discourse.

#### GRDS 304 Graphic Design IV

6 cr.

The course covers the design of printed publications in their various formats and audiences, ranging from mass media (newspapers, magazines etc.) to special interest publications (fanzines, limited edition books etc.), where processes of art direction and the design of layout systems for multipage prints will be covered. While learning to materialize editorial concepts and content into graphic form, students also develop advanced skills in organizing complex information, and devising appropriate compositional, typographic and image solutions. *Prerequisites: GRDS 203 and a combined grade average of 70 in GRDS 202 and GRDS 203*.

#### GRDS 305 Graphic Design V

6 cr.

A studio course in package design and the principles of advertising campaigns. Combination of experimental and real situation projects. *Prerequisites: GRDS 203 and a combined grade average of 70 in GRDS 202 and GRDS 203*.

#### GRDS 325 History of Graphic Design

3 cr.

Starting with Gutenberg's 42 line bible as the first specimen of movable type printing, the course will cover a period of time from the 15th century till today. The course is conceived of thematically with the intention to address the conceptualization of Graphic Design as a discipline directed by various interpretative inquiries into the History and Theory of graphic communication. The course is formulated in a way that enables the students to take part in the current debate around graphic design theory and practice. *Prerequisite: ARCH 224*.

#### GRDS 343 Motion Graphics

3 cr.

Motion Graphics is an advanced course in computer-related design, introducing students to multimedia design. The student explores the process of designing in relation to time and motion, and learns to adapt graphic knowledge to explore concepts of movement in time, sequential imagery, and motion graphics through animation. Projects involve the use of various animation techniques including 2D cell animation, claymation, and stop motion animation. It includes an overview of 3D modeling and animation. *Prerequisite: GRDS 242*.

#### GRDS 344 Interactive Media Design

3 cr.

An advanced course in multimedia, exploring the various areas where interactivity is used ranging from interactive CDs to web design and interactive touch screens. Students concentrate on information architecture and information structure by designing for interactivity. *Prerequisites: GRDS 242, GRDS 343*.

#### GRDS 361 Professional Practice

3 cr.

This course prepares students to face the REAL WORLD. Students learn to present themselves properly for interviews both in the materials/documents they provide and in the way they present themselves. The course addresses the profession as a practice through CV writing and the preparation of a portfolio, pre-production and production.

#### GRDS 406 Final Project Design and Research I

6 cr.

A research-oriented studio in which students are expected to critically explore issues of personal interest and of general importance to the discipline of graphic design. The research should lead towards the articulation of a design/visually-rooted hypothesis that sets up the theoretical paradigm and the concept directing the design investigation to be carried out in the project-thesis phase (GRDS 407). The outcome is presented in a research document that includes a preliminary design proposal supported by the research findings. Students work independently and in consultation with a chosen adviser from the faculty. Work in progress is presented and discussed with a panel of advisers in the course of the semester. *Prerequisites: GRDS 305 and GRDS 304, and a combined grade average of 70 in GRDS 304 and GRDS 305.* 

#### GRDS 407 Final Project Design and Research II

6 cr.

This is the second half of a year-long design thesis and the culmination of the design studio training. Students integrate and synthesize acquired knowledge and skills, and elaborate, through concrete design experimentations and implementations, the hypothesis proposed in GRDS 406, with the aim of arriving at a completed project that materializes a full-fledged design-thesis. Students work independently and in consultation with a chosen adviser from the faculty. Work in progress is presented and discussed with a panel of advisers in the course of the semester. At the end of the semester the completed projects are presented for evaluation to a jury of faculty members and invited professionals. *Prerequisite: GRDS 406*.

#### GRDS 462 Approved Experience

1 b.

This is an eight-week professional training period at a design office, advertising agency, television station, or publisher.

For other mandatory core courses such as ARCH 100, ARCH 121, ARCH 122, ARCH 223, and ARCH 224 please refer to the architecture core course descriptions.

### **Elective Courses**

The elective courses in the Graphic Design Program are offered within the Department of Architecture and Design and some are open to students in all faculties. They are distributed into three categories:

Category A: Representation Skills (01); Category B: History (02), Theory and Methodology (03); Category C: Digital Media (04), Typography (05), and Professional Practice (06). Electives are chosen in consultation with the assigned adviser, and in accordance with the load distribution (mentioned earlier under program description).

The following list of courses is subject to change as new electives are introduced every year.

## Category A: Representation Skills

#### GRDS 012 Silkscreen 3 cr.

This course teaches students the fundamental principles of silkscreen printing and to be creative in their approach to printmaking. Silkscreen, one of the most versatile and widely used methods of printmaking, will be fully explored in this studio class through demonstrations and self-initiated projects. Students will be encouraged to experiment with multiple techniques and combinations of traditional and contemporary methods of serigraphy; and search for solutions that best translate the nature of their work to the medium.

#### GRDS 013 Advanced Illustration

3cr.

This elective, following up on the Illustration class in the required curriculum (or the various Illustration Workshops given previously), is an exploration of the popular and public nature of illustration working with a selection of techniques which historically have fulfilled this purpose photographic collage, Japanese woodcut, colored stencil, and mural painting. *Prerequisite: GRDS 214 or permission of instructor.* 

#### GRDS 014 Engraving and Etching

3 cr.

This course is an introduction to the fundamentals of intaglio printmaking processes. It covers the non-acid methods such as engraving, dry point and mezzotint and acid methods like etching (hard and soft ground) and aquatint. This studio art course covers the needed technical information; however emphasis will not only be placed on the technical production of art works but also on the content and concepts of printmaking.

#### GRDS 016 Advanced Photography

3 cr.

The Advanced Photography course takes the student one significant leap further in the understanding and use of the medium in both the analog and digital format. It addresses the aesthetics of picture making at a more advanced level of technical, artistic, and creative development. Major emphasis is placed on developing a thoughtful approach toward the seeing and making of meaningful photographs that communicate with the viewer. *Prerequisite: GRDS 113*.

## Category B: History, Theory, and Method

#### GRDS 020 Signs of Conflict and Resistance

3 cr.

The course addresses the deployment of political rhetoric in graphic design, historically and in contemporary practice. It examines those particular moments of political conflict - war, resistance, and revolt - where visual artifacts in different print formats become important vehicles through which ideological constructions are materialized and diffused. The course uses a case study of the graphic production by Lebanese political parties and movements during the civil war (1975-1990) while covering other significant cases that enrich and inform this main investigation.

#### GRDS 030 Proximity and Imminence

3 cr.

The course is open to all senior undergraduates across AUB departments with no prerequisites. This elective course approaches texts written at the limit of representation when the pressing onslaught of the here and now precludes any access to reflective and contemplative thought. It also proposes a close reading of texts written after the event, when a catastrophe has occurred but can only later be experienced as contemporary.

#### GRDS 032 Mediated Spectacles (new theories and cases)

3 cr.

A seminar course that engages students in the activity of analysis and critical assessment of the role of mediated images in modern everyday life. It takes as case studies the production and circulation of images in Arab popular culture and media, ranging from modern leisure and commodity poster advertisements to contemporary music videos and other image-potent cultural forms. It addresses the paradoxical relation between a cosmopolitan *sameness* brought by increasingly global cultural flows, and an *alterity* negotiated in and through the production of cultural localities and social identities. The seminar is directed through theoretical approaches and methodological tools of investigation that address the mechanism of the 'image', in terms of its signifying practices, social imaginaries and power relations in which it is embedded.

#### GRDS 036 Seeing Rude and Erudite

3 cr.

This seminar proposes an investigation of seeing, understood both as an authoritative discourse and as an embodied physical sensation. The aim and ambition of this seminar is to question the authority of the visual and to identify what is unrecognized in the act of seeing.

## Category C: Digital Media, Typography, and Professional Practice Digital Media

#### GRDS 042 Rough Cuts: An Introduction to Video

3 cr.

Filmmaking is used here as an umbrella term, rather than referring to the actual process of shooting on film, and is used to connote the mixed media bag of filmic narrative, including video, sound, animation and stills. All of these can come together in the making of a film. With the democratization of audio/video editing from an elite, exclusive and expensive art to a popular and commonplace tool, the art of filmmaking has become within reach of everyone with a computer. Filmmaking itself has mutated into a variety of different forms depending on the vessel, be it YouTube, cell phone video and soap operas, CCTV surveillance footage, webcams, satellite imagery, video installations, etc. The ubiquity of footage is a testament to our current audio/visual culture and the digital revolution gives everyone the access to produce work within this culture.

#### GRDS 044 Pattern, Rhythm, Meter: Programming Design

3 cr.

This elective examines aspects of students' design vocabulary - pattern, rhythm, time, language, space, etc. - through the use of computer programming and applied algorithms to create visuals, music, animation, as well as typographic form and text. Through this exploration, they will gain a greater insight into the "internal workings" of the computer and their software applications, an awareness of the overlap between science and art, and pro-active tools that they can readily apply in their design work. Prerequisite: 4th-year status in graphic design, architecture, engineering, or permission of instructor.

#### GRDS 045 If Walls Could Talk/ Talking Walls: Urban Graffiti Animations

3 cr.

A departmental elective course offered to Architecture and Graphic Design students covering the techniques, principles and processes of stop motion animation, particularly focusing on painting on walls and urban surfaces. Students are encouraged to explore the relationship of the method of expression and techniques employed with the concepts, themes and issues, using alternate interpretations beyond the literal and classical narrative constraints. Students will be examining motion, tempo, rhythm, depth, color, texture, form, matter and spatial representation and relation. By the end of the course the students will produce a complete edited stop motion animation short film that will be publicly screened in the original setting.

#### GRDS 049 Move Me, Freeze Me, Shoot me

3 cr.

This is an elective course covering Stop Motion Animation techniques, principles and processes. Students are exposed to, and experiment with various stop motion animation mediums and types; examining: motion, tempo, rhythm, orientation, color, texture, form, and matter. They are encouraged to evaluate different processes of animation and to develop problem-solving methods through their assignments, and the analysis of screened features, to enhance the skills gained in visual art training and to integrate visual vocabulary with conceptual and creative procedures. *Prerequisites: 4th and 5th year status in GD or ARCH.* 

### **Typography**

#### GRDS 053 Advanced Arabic Typography

3 cr.

In addition to a new and summarized historical overview, the study of Arabic calligraphy involves dealing with the problems facing this traditional art in its efforts at modernization, innovation, and adaptation to new technologies. This consists of two approaches to the subject, one that looks at the Arabic script as an art by itself: calligraphy; and the other that ponders its reformist and media function, or its applications in modern life.

#### **Professional Practice**

#### GRDS 061 GraFix in the Environment

3 cr.

We are bombarded daily with visual clutter, noise, buildings, people, beggars, cigars, clothes, shops, garbage, cars, horns, broken sidewalks you name it! Then there are signage, posters, and billboards! All are components of our GraFix in the Environment! This course is based on research, presentations, and a series of small projects illustrating the various aspects of 'GraFix.'

#### GRDS 063 Personal Expression through Serial Media: Zines, Comix, and Art Books

3 cr.

Printed matter has historically provided a means for artists to express themselves. This course studies alternative media and builds upon the lessons learned in the publication design class. These lessons are applied to a variety of specialized publications allowing students to focus on their content while developing their form. Using printing methods, high and low-end, high and low-tech, students explore ways in which serial media provide an outlet for personal expression.