

Philadelphia University
Faculty of Engineering
Department of Architecture
First Semester (2022/2023)

Course Syllabus

Course Title: Architectural Design 5	Course code: 0660354
Course Level: 3 rd year	Course prerequisite (s): Architectural Design 4
Lecture Time: Monday & Wednesday 08:15-12:15@61309	Credit hours: 4

Academic Staff Specifics

Name	Rank	Office Number and Location	Office Hours	E-mail Address
Dr. Afnan Saleh (Academic Coordinator)	Assistant professor	61-316	Sunday and Tuesday, 10:00-11:00	a.saleh@philadelphia.edu.eg

Course description:

This course introduces the students to the site, the context, human interactions with the built environment, and the current theoretical discourse in architecture as prime generators of design decisions. The design problem in this course should seek to build skills of site analysis, studying of an urban environment in use, considering spaces as places, analyzing those features of a place that are going to shape users' interactions, testing the personal ethical position, in addition to deciding new architectural interventions and forms as a moderator of the urban space and human experience. Relevant design problems are those on sloping sites of a public building such as: library building, college building, hostel, religious building, museum, club, courthouse, embassy... etc.

Course Content

no	Course Topics	Learning outcome
1	Site analysis	
2	Context analysis	
3	Case studies analysis	
4	User interaction with the built environment	

5	Defining a theoretical perspective	
6	Building design criteria based on context and user experience	
7	Site planning	
8	Design concept	
9	Developing the design concept into clear architectural drawings	
10	Using proper architecture representation	
11	Oral, written and graphic expression of design thinking process	

Course objectives:

Enhancing the student ability of creative thoughts during formation of architectural works is the main issue of this design course with emphasis on the site, the context, the user, the case study, and the personal vision as external motives of creativity in design. The course objectives are:

1. To examine a building integration with its site during the time to perceive how significant and unavoidable is the role of site during designing process.
2. To improve the student ability to use the site and the surrounding environment as significant factors for creating in architecture.
3. To improve the ability to find a creative solution which respond to the user needs and problems. Applying a proper concept and design methodology which respect the human factor in architecture.
4. To enhance creative thoughts by utilizing the student personal temperaments, attitudes, characters to provide an opportunity for students during formation of architectural works.
5. To enhance creative thoughts by developing the student knowledge of relevant case studies.
6. To improve the student abilities of continuity and insistence in developing a design concept for their significant role in achieving creativity.
7. To improve the ability of providing a successful, realistic and meaningful presentation.

Course components

Presentations and lectures are planned according to the selected project site

Books;

Support material;

Various illustrations on Data Show, books, magazines, articles, and YouTube.

Visiting Architects and interviews

Online discussions using the official eLearning site.

Homework and laboratory guide:

A series of exercise sheets designed to achieve the course objectives. Each sheet includes exercise description, exercise objective, required instruments and materials, and guiding instructions and the time of work to produce required submittals.

Teaching methods:

(Lectures, discussion groups, tutorials, problem solving, debates, etc)

This course follows the process of enhancing the student's talents and practical experience. In order to achieve this, the followings should be taken into consideration;

- Each exercise objectives are explained in details to ensure the student's ability to be involved in the experiment.
- The student needs a strong desire, patience, perseverance, commitment, and most of all practice so to gain confidence in his/her ideas and abilities.
- Exercises are designed in a way that provides the student with analytical skills enabling him/her with the ability to start the architectural design process.
- Architectural design is a continuous process of decision making. Accordingly, this course requires and enhances the student's decision making, self-assessment, problem solving, and presentation skills.

Program Learning Outcomes (PLO):

A.6 Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.

B.2 Site Design: Ability to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.

القدرة على ربط مشاريع التصميم مع الحلول المناسبة لتنسيق المواقع

القدرة على التجاوب مع معطيات وخصائص الموقع مثل التربة، مناسيب الارض، الغطاء الاخضر، والعناصر المائية عند تطوير تصميم الموقع

N.1 Design Philosophy: القدرة على تطوير البعد النظري والفلسفي الاولي للمشروع

N.10 Design for human behavior: القدرة على التعامل مع العلاقة بين سلوك الانسان البيئة الطبيعية والتصميمي للبيئة المبنية

Course Learning Outcomes (CLO):**Knowledge and understanding:**

1. To understand practices of designing a similar building type, context, site, and users throughout selected case studies.
2. To know the current theoretical discourse and debates in architecture

Intellectual Skills

3. Ability to use the site and the surrounding context as motivations of creative ideas.
4. Ability to use case studies to develop design ideas by restructuring the old ideas to produce singular inventions.
5. Ability to apply a proper concept and design methodology which respect the human factor in architecture.
6. To use personal value systems and ethical positions in forming an architectural idea.
7. Ability to develop design ideas into a mature design concept.

Professional and Practical Skills

8. Ability to document and present an existing physical environment of small scale.
9. Ability to make a proper site analysis of: urban context and developmental patterning, historical fabric, soil, topography, ecology, and climate.
10. Ability to define the user needs and involve the user in the design process.
11. Ability to value the cultural heritage

General and Transferable Skills

12. Ability to continually refine and develop the design concept into a primary design
13. Appreciate the cultural heritage

#	Course Learning Outcomes (CLO):	Program Learning Outcomes (PLO):	Learning Taxonomy	
			Understanding	Ability
1	To understand practices of designing a similar building type, context, site, and users throughout selected case studies.	A6	<input type="checkbox"/> Understanding	<input type="checkbox"/>
2	To know the current theoretical discourse and debates in architecture	N1	<input type="checkbox"/> Remembering <input type="checkbox"/>	<input type="checkbox"/>
3	Ability to use site and the surrounding context as motivations of creative ideas.	B2	<input type="checkbox"/>	<input type="checkbox"/> Evaluating <input type="checkbox"/> Creating

4	Ability to use case studies to develop design ideas by restructuring the old ideas to produce singular inventions.	A6	<input type="checkbox"/> Understanding	<input type="checkbox"/> Evaluating <input type="checkbox"/> Creating
5	Ability to apply a proper concept and design methodology which respect the human factor in architecture.	N10	<input type="checkbox"/>	<input type="checkbox"/> Applying <input type="checkbox"/>
6	To use personal value systems and ethical positions in forming an architectural idea.	N1	<input type="checkbox"/>	<input type="checkbox"/> Applying
7	Ability to develop design ideas into a mature design concept.		<input type="checkbox"/>	<input type="checkbox"/> Evaluating <input type="checkbox"/>
8	Ability to document and present an existing physical environment of small scale.		<input type="checkbox"/>	<input type="checkbox"/> Applying <input type="checkbox"/>
9	Ability to make a proper site analysis of urban context and developmental patterning, historical fabric, soil, topography, ecology, and climate.	B2	<input type="checkbox"/>	<input type="checkbox"/> Analyzing <input type="checkbox"/>
10	Ability to define the user needs and involve the user in the design process.	N10	<input type="checkbox"/>	<input type="checkbox"/> Applying <input type="checkbox"/> Analyzing <input type="checkbox"/>
11	Ability to value the cultural heritage		<input type="checkbox"/>	<input type="checkbox"/>
12	Ability to continually refine and develop the design concept into a primary design		<input type="checkbox"/>	<input type="checkbox"/> Evaluating <input type="checkbox"/> Creating
13	Appreciate the cultural heritage		<input type="checkbox"/>	<input type="checkbox"/>

Assessment instruments

Work for the class will include extensive reading, two short written exercises, a longer final paper, and three exams (two in-classes and the other a final). It is essential that all reading be completed in advance of each class. There will be an occasional pop quiz on the day's assigned readings. These readings will affect your class participation grade; if you don't do the readings, you can't participate in class discussion.

Allocation of Marks			
	Assessment Instruments	Wight	Mark
Midterm Exam	Submittal 1 (5%), Submittal 2(10%), Submittal 3 (5%), and Submittal 4-a (10%)	30%	30%
Reports	Submittal 4-b (15%) and submittal 5 (15%)	30%	30%
Final Exam	Submittal 6 (15%) and submittal 7 (25%)	40%	40%
Total		100%	100%

Engineering student should have the ability of time management. Consequently, assignments and exercises should be submitted on time. A bonus of 5% of the students' grade will be awarded to those who submit their projects on time. A penalty of 5% of the students' grade will be inflicted for each day of delay (weekends included).

Documentation and academic honesty

The students are trusted to act honorably. Those who are in violation of the academic honesty can be subjected to standard penalty for a first offence includes issuing "No Pass" or "No Credit" for the exercise in which the violation occurred. The standard penalty for a multiple violation includes "No Pass" or "No Credit" for the course. Examples of conduct which to be regarded as being in violation include unpermitted collaboration and representing the work of another as one's own work.

Course academic calendar

Week No.	Dates	Subject	Readings and homework	
1.	October 18-22	Introduction Project brief		
2.	October 25-29	Project identification and valuation Creative ideas and opportunities for profit		
3.	November 1-5	Site analysis – existing building documents Context analysis		
4.	November 8-12	Case studies analysis Architecture style and philosophy		
5.	November 15-19	Building adaptive reuse Market and restaurants Zoning		
6.	November 22-26	Plans		
7.	November 29-3	Plans	Midterm exam	
8.	December 6-10	Mood panel	Midterm exam	
9.	December 13-17	Site planning: Trail design Entrances		
10	December 20-24	Plaza design, Parking design, Security system, Signage system		

Week No.	Dates		Subject	Readings and homework	
11.	December	27-31	Site plan		
12.	January	3-7	Prefinal design		
13.	January	10-14	Final modifications		
14.	January	17-21	Presentation		
15.	January	24-28	Final Jury		
16.	January	31-4			

Expected workload:

Architectural Design courses are the most important courses for the architectural engineering student. This course involves creative tasks that require patience and continuous practicing which implies spending extra time (not less than 10 hours/week) in working on projects and exercises.

Course laboratory and application hours including jury, presentations and exam weeks: 16*8 hours = 128 hours; Study hours out of class and Project: 128 hours; field work: 24 hours

Total expected workloads = 280 hours

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15% (=4 full sessions). Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/Faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

References

Invited specialists and context related stakeholders

Books

Dechiara, Joseph and Hancock, John. 1973. *Time-saver Standards for Building Types*. New York: McGraw-Hill, 1973.

Fawcett, A. Peter. 1998, 2003. *Architecture: design notebook*. s.l.: Architectural Press, 1998, 2003.

Neufert, Ernst and Neufert, Peter. 2002. *Neufert's Architects' Data.* s.l.: Blackwell Publishing Professional, 2002.

The American Institute of Architects . 2007. *Architectural Graphic Standards.* s.l.: John Wiley & Sons Ltd., 2007.

Journals

ARQ: Architectural Research Quarterly

Architectural Record

Architectural Review

Websites

<https://architizer.com>

<https://thinkarchitect.wordpress.com/>

<http://www.archdaily.com/>

www.dezeen.com