



**DEPARTMENT OF ARCHITECTURE
UNIVERSITY OF THE PUNJAB, LAHORE.**

**BACHELORS OF ARCHITECTURE (B. ARCH)
5 YEARS PROGRAM**

COURSE OUTLINE

Course Title	Architecture Design III
Course Code	ARCH-303
Credit Hours	7
Semester	Fall
Prerequisites	NA
Tutor	As per Timetable
Student Advising	As per Timetable
Contact	-

Teacher Signature

Chairman Signature



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Project Brief

<u>TITLE:</u>	Architecture Design Studio- III
<u>COURSE CODE:</u>	-
<u>CLASS:</u>	-
<u>RESOURCE PERSONS:</u>	-

PROJECT TITLE:

Designing a Hospital: Healing through Architecture.

Duration: 9 Weeks

INTRODUCTION:

PROJECT BACKGROUND:

Today's perfect hospital design addresses many functions for a variety of users, including patients, families, staff, and c-suite. And while patients and their families are the primary focus for many healthcare institutions, even a list that focuses on patient-centered design is extensive. Our hospitals are designed in such way that it generates only stress and seems as world is ending. Hospital should have hopeful environment.

Healthcare architecture has to be not only pleasant to the user, but also the doctors and nurses. It's for the medical professionals working there. This is because they spend so much time there. There should be facilities that will give the hospital personnel a level of comfort. They should be comfortable working there and want to come back. All that should come together and work in harmony. It is all important.

AIMS AND OBJECTIVES:

1. Provide a functional design that ensures efficient, safe and appropriate work spaces.
2. Create clear, segregated paths for movements of people (staff, patients, and visitors) and materials within the building.
3. Create humane environment for patients and staff.
4. Blend technical and functional requirements into a design that brings delight to those who use the building.

CHECK LIST FOR STUDY:

While doing research for the project, these main aspects should be kept in mind so it can be incorporated in design phase:

1. Welcoming Design Aesthetic:

This includes covered drop-offs with valet parking, open and transparent lobbies and public spaces, and warm, natural materials that evoke a sense of comfort. Concierge and check-in services are becoming more common.

2. Internal Way finding:

When architecture, medical planning, interior design and environmental graphics harmoniously blend, a first-time visitor can walk through a space without the aid or “you are here” maps. Aligning the patient journey with key architecture and interior elements alleviates the need for excessive signage, which can become distracting. Less signage also means more room for design that creates joy and delight

3. A Better Waiting Area:

The same holds true for check in desks and waiting areas – use the spaces and their visual identities to intuitively help patients navigate. The waiting room is one of the most stressful parts of a visit so make it an amazing place to be: provide expansive views, windows for daylight, art and beautiful, comfortable furniture. Locating waiting areas along the perimeter is an effective way to promote way finding and mitigate patient and family stress.

4. Pleasant Clinical Environment:

Patients and staff benefit from a well-designed space. While it is tempting to focus only on lobbies and waiting areas, clinical areas need just as much attention. Imaging suites, procedure rooms where patients are conscious, and blood-draw stations benefit from natural daylight and positive distractions in art, material palette and views. These areas are critical in creating a calming and healing environment.

5. Healthy Building = Healthy Occupants

Healing happens inside hospitals and the building itself should participate in that healing process. Designing with Red List-free materials, providing clean and filtered air, and offering access to outside experiences with operable windows or terraces in places where immune systems are not compromised are all strategies for healthier buildings. Looking beyond patients to a healthier planet, excess heat, rain and wind should be captured and stored for use.

6. Dignified Discharge

Finally, consider how to give a dignified exit for patients who are leaving the hospital, but still require assistance. Provide a comfortable and private discharge route that does not go through the

main hospital doors for those using crutches or a wheelchair for the first time or recovering from a day procedure. This not only provides the departing patient a more dignified departure but can calm nerves for new patients entering the hospital.

7. Efficiency:

“We should develop layouts that are effective and efficient, minimizing the travel time for caregivers. The less time a caregiver spends walking, the more they can spend with patients. This also includes making practical use of multi-purpose spaces and consolidating spaces when possible.”

Major movements in hospitals:

1. Patient movement.
2. Staff movement.
3. Supply delivery.
4. Disposal of used items/goods.
5. Laundry service.
6. Food service.
7. Domestic services etc.

8. Environmental factors and services:

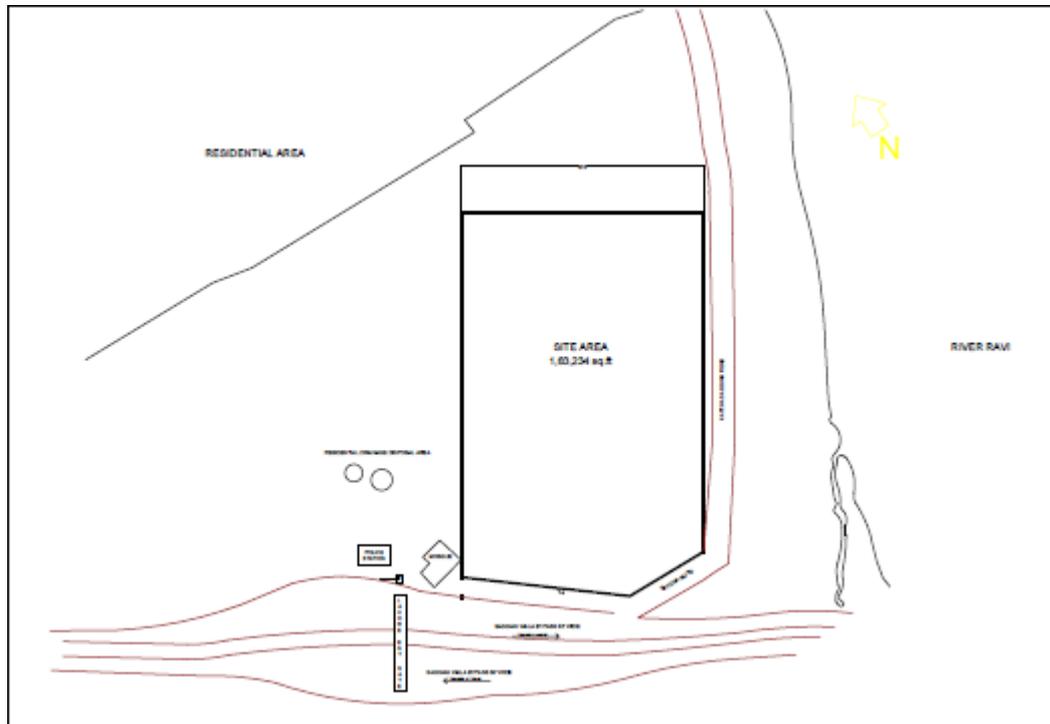
1. Emergency exit.
2. Fire protection.
3. Sterilizing and sterile supply.
4. Security.
5. Hot & cold water supplies.
6. Heating & Ventilation.
7. Lighting.

Functional Relationship:

Study of functional relationship between various departments and between rooms with in department. Departmental Requirements: Separate considerations for each department should include:

1. Description of functions and facilities.
 - a) Procedures, operational policies.
 - b) List of rooms.
2. Qualitative parameters:
 - a) Location, relationship to other rooms, services and departments.
 - b) Function of activities carried out in room.
 - c) Disposal of medical equipment/medicines used during treatment.
 - d) Number of staff and patients using room at one time.
 - e) Wheeled traffic.
 - f) Work flow.

SITE PLAN:



MARKS BREAKDOWN:

Week No	Milestone	Marks
1.	Introduction to Project <i>(Discussion on nature of project & case studies and final drawing of site)</i>	10 %
	Presentation on Case studies	
2.	Formulation on Requirements <i>(Area Calculation)</i>	20 %
	Site Analysis <i>(Macro, meso & micro level)</i>	
3	Planning of Building <i>(Working on site plan, floor plans)</i>	20%
4	Discussion on Elevations & Sections	10%
5.	Working on Final Drawings <i>(case studies, site analysis, Site plan, Floor plans + 3D & Model)</i>	10%
6	Final Submission Jury <i>(Final product to be shown with all previous stages)</i>	30%

RECOMMENDED READINGS:

1. Healing the Hospital Environment Design, Maintenance and Management of Healthcare Premises -
2. -GUIDELINES FOR DESIGN AND CONSTRUCTION OF HOSPITAL
3. AND HEALTH CARE FACILITIES by The American Institute of Architects Academy
4. of Architecture for Health
5. -District Hospitals Guidelines for development - 2nd Edition by World Health Organization
6. Architecture and the modern hospital - Julie Willis
7. Building type basics for healthcare facilities by Stephen A. Kliment

SUBMISSION REQUIREMENTS:

Entire process work. Literature Review (its conclusions), CaseStudies (its Conclusions), Site Analysis (its Conclusions).

- Zoning study + bubble diagrams + Archi program.
- Final Manually Rendered Master plan (1/32"=1'-0").
- Final Detailed Floor Plans (1/16"=1'-0").
- Drafted & Rendered Elevations (At least 2 Major Facade's showing material details).
- 1 Detailed Section.
- 3d Views (manually sketched on proportionate scale showing form and landscape views).
- Additional Interior Views (for the spaces which are treated in innovative manner).



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PROJECT TITLE:

Under One Roof: Mixed Use House

Duration: 9 Weeks

INTRODUCTION:

PROJECT BACKGROUND:

Compounded by global issues such as resource scarcity, the migration to cities is placing great responsibility on urban buildings to do many things, and do them well. Mixed-use development, the physically integrated combination of residential, commercial, cultural, and transportation functions, consolidates activity within a structure or neighborhood. In our densifying cities, the adoption and thoughtful execution of mixed-use development is a necessity.

What is Mixed Use Building?

A mixed-use building is a type of a commercial property that includes both commercial and residential space. In addition to the aforementioned storefront, another example home hunters are likely to encounter is a single-family property with a ground floor doctor's office.

AIMS AND OBJECTIVES:

1. To understand the design of multiuse space at different levels.
2. Responding to the urban environment.
3. Understanding Passive Design Techniques.
4. Role of Site Analysis in design.
5. How to develop an architectural brief based on user analysis.

GOALS AND THE PROJECT:

Design development based on site analysis program development based on every individual along with a collective analysis of the family.

SITE PLAN:

Site is located in the heart of Lahore. Surrounded by famous buildings like Badshahi Mosque, Lahore Fort and one of the most famous street of Lahore “Food Street”. Land use of the area is mixed use in cooperating commercial and residential uses.



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3	Planning of Building <i>(Working on site plan, floor plans)</i>	20%
4	Discussion on Elevations & Sections	10%
5.	Working on Final Drawings <i>(case studies, site analysis, Site plan, Floor plans + 3D & Model)</i>	10%
6	Final Submission Jury <i>(Final product to be shown with all previous stages)</i>	30%

RECOMMENDED READINGS:

1. Experiencing Architecture by Steen Eiler Rasmussen.
2. Neufert Architects' Data, Fourth Edition 4th Edition by Ernst Neufert.
3. The Poetics of Space by Gaston Bachelard.
4. Form Space & Order by Francis DK Ching.
5. Time Saver Standards for Building Types by Joseph De Chira
6. Building Your Own Home by David Snell
7. Contemporary Homes 3: Inspirational Individually Designed Homes

SUBMISSION REQUIREMENTS:

- Literature Review / Conclusions
- Case Studies Conclusions
- Site Analysis Conclusions
- Design Considerations.
- Site plan
- Plans
- Sections
- Elevations
- 3D Views
- Model