

# ENVIRONMENTAL DESIGN

## DESIGN FOR CHILDREN (1592)

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*Supplementary Material*  
*Spring, 2014*

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**ALLAMA IQBAL OPEN UNIVERSITY**  
Department of Home and Health Sciences

**ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD  
(Department of Home and Health Sciences)**

**Course: Design for Children (7778/1592)  
Level: MS**

**Semester: Spring, 2014  
Credit: 2(1+1)**

**CONTENT LIST**

This study pack includes the following items:

1. Course Books
2. Course Outlines (Units 1–9)
3. Tutor Guide
4. Student Guide
5. Assignments (1 & 2)
6. Assignment Forms
7. Schedule for Submitting the Assignment and Tutorial Meetings

If any of the above mentioned material is missing in your pack, please contact at the following address:

**Mailing Officer  
Services and Operations Block  
Allama Iqbal Open University  
H-8, Islamabad**

# COURSE OUTLINES

## **Text Book:**

- a) Child Care Design Guide by Olds, Anita Rui

## **Reference Books**

- b) Design Standards for Children's Environment by Ruth, Linda Cain
- c) Building for young Children: A practical guide to planning, designing and building the perfect space by Dudek, Mark

## **Unit 1. Introduction**

- 1.1 Need for Well Designed Environments for Children
- 1.2 Current Global Scenario
- 1.3 Growing Need for Designed Day Care Environments for Children in Pakistan.
- 1.4 Concept of Friendly/Homely Environment in Children Day Care Centers

## **Unit 2. Design Process: Child's Perspective**

- 2.1 Design Team and it's Mission
- 2.2 Design Process: Eight Stages
- 2.3 Planning: Need Assessment from Child's Perspective
- 2.4 Preliminary Site Considerations

## **Unit 3. Building Layout Design**

- 3.1 Approach and Entry
- 3.2 Interior Circulation
- 3.3 Indoor and Outdoor Relationship
- 3.4 Spatial Organization
- 3.5 Key layout Considerations
- 3.6 Identification of Functional Requirements
- 3.7 Steps to Zoning and Layouts

## **Unit 4. Designing Functional Spaces for Children**

- 4.1 Anthropometrical Measurements of Children
- 4.2 Standard Dimensions of Children's Built Environment
- 4.3 Spaces for Infants & Toddlers
- 4.4 Spaces for Preschoolers
- 4.5 Spaces for School age Children

## **Unit 5. Power of Colour**

- 5.1 Understanding Colours
- 5.2 Selection of Appropriate Colours
- 5.3 Choosing Interior and Exterior Colours
- 5.4 Unifying the Building Colours

**Unit 6. Finishes & Furnishings**

- 6.1 Selection of Appropriate Textures
- 6.2 Interior Finishes (Floors, Ceilings, Walls)
- 6.3 Signs and Art Work
- 6.4 Furniture/Equipment
- 6.5 Accessories
- 6.6 Finishing Touches

**Unit 7. Criteria for Good Day Care Design**

- 7.1 Building Ecology and Sustainable Design
- 7.2 Thermal Control
- 7.3 Building Services (Water, Sewerage etc.)
- 7.4 Sound Control for Children Needs
- 7.5 Lighting Control (Natural and Artificial)
- 7.6 Ventilation and Security (Windows and Doors)

**Unit 8. Outdoor Play spaces for Children**

- 8.1 Importance for Nature
- 8.2 Quiet play and Private places
- 8.3 Design Guidelines for Children's Play Environment
- 8.4 Equipment Design for Play
- 8.5 Safety and Security in Play Areas

**Unit 9. Spaces for Staff and Parents**

- 9.1 Staff requirements
- 9.2 Parents Requirements
- 9.3 Community Concept within the Care Environments
- 9.4 Environments for Special Children.

## TUTOR GUIDE

Dear tutor,

On behalf of AIOU and course team of “Environmental Design Programme,” I welcome you as a tutor to the “Design for Children” course. You might be aware that the students enrolled in this programme have varied professional background and work experience. However, they all have common interest to deal with environmental issues related to the building design.

### Course Objectives

Designing environments for children is a complex task-a task requiring a careful balance of form and function that nurtures the children and assists their careers. Concern for the welfare of children and the environments in which they grow, learn and heal is not yet taken seriously and very little research has been taken in this context.

The course “Design for Children” has been designed to raise issues concerning need for well-designed environments for children particularly focusing on early years that are crucial in child development. The course has particularly focused on growing need for well-designed day-care centers in changing living patterns where more and more women are entering in jobs.

The course aims at:

- Introducing the significance of well designed environments for children
- Providing guidelines for designing functional spaces for children
- Imparting criteria for good building design and outdoor spaces

This course intends to impart knowledge and skill to design children environments according to their developmental needs.

### Course Structure

This is of 2(1+1) Credit Hours course and comprises nine units (The course outlines and chapter wise distribution is explained below for your reference).

**Unit 1: “Introduction”** It is based on chapter 1 and 2 of the text book “**Child Care Design Guide**” by **Olds, Anita Rui**. It covers the significance of well-designed care environments in response to economic pressures and growing number of females taking up jobs.

**Unit 2: “Design process: Child’s Perspective”** It is covered in chapters 3 and of your book. This unit examines the eight stages of design process that gear towards the child friendly environment.

**Unit 3: “Building Layout Design”** It is discussed in chapters 5,6 and 7 of the textbook and describes the important considerations for building layout and interior zoning.

- Unit 4: “Designing functional Spaces for Children”** It is covered in Chapters 16,17 and 18 of book. It focuses on the impact of well-designed environments on growth of young children (infants, toddlers, preschoolers and school age children).
- Unit 5: “Power of Colour”** is examined in chapter 12 of book. This unit discusses the power of colour to create stimulating and exciting functional spaces for various activities.
- Unit 6: “Finishes & Furnishings”** It is included in chapters 13 and 14 of book. It covers guidelines for the selection of appropriate textures and finishes for floors, ceilings and walls. It also includes criteria for selection of useful furniture style.
- Unit 7: “Criteria for Good Day Care Design”** This unit falls under the chapters 8,9,10 and 11 of your book it analyzes the sustainability features in day-care or nursery environments. It promotes noise control, natural lighting and thermal comfort features on ecological principles.
- Unit 8: “Outdoor Play spaces for Children”** It is based on chapter 20. This unit highlights the importance of outdoor play spaces for children and emphasize on security and safety in play areas.
- Unit 9: “Spaces for Staff and Parents”** This unit is covered in chapter 14 of your book and reminds for the provision of functional/comfortable spaces for parents and caring staff.

These students have very limited contact with their course mates and the part time tutors. It is therefore important to keep in mind that some of the distance-learning students have had no links with education during the past few years after completing their formal education, therefore, they might lack confidence. Secondly, distance-learning students are involved in studying during their spare time, probably after office hours. You are therefore requested to guide and help the students while keeping these issues in mind. Some student may need help in developing professional attitudes as well as understanding the facts about creating child friendly care environment.

#### **Study Center:**

The main purpose of establishing the study center for distance learning students is to provide help and guidance for the difficulties faced by the students, while studying at home. The study centers have been established in local institutions. During the lecture sessions, it is required to provide guidance to the students to sort out their problems.

#### **Assignments:**

In the distance learning system, studying the course units has its own importance but assignments and workshop are the major source of link between tutor and the student.

Therefore, it is important to offer you comments through these assignments. Express your views in such a way that the student is not discouraged, hurt or feels depressed after going through your comments.

You are expected to guide on issues like methods of solving assignments, effective methods of studying, and methods to improve study habits and working hard.

**Assignment two is research based and requires field survey. Advise students to discuss the assignment in the lecture sessions at various stages of research activity (at least three times before finally presenting in the workshop).**

1. **The stage one may be clarity on topic to develop objectives of study.**
2. **The stage two can be literature review and design of research tool (questionnaire etc.).**
3. **The stage three can be data analysis and presentation style.**

It is anticipated that the student will submit their assignment in time according to the prescribed schedule. You are, therefore, requested to mark the assignments within 15 days and return these with detailed comments within the scheduled dates.

Marking Guides are provided to you. You are expected to follow the instructions and make full use of these guides while marking the assignments. The students are expected to avoid giving unnecessary details and try to be brief and comprehensive. While marking the assignments, the tutor has to assess whether the students have followed the instructions provided to them or not.

## STUDENT GUIDE

Dear Student,  
Assalam-o-Alaikum

We welcome you to the M.S Environmental Design course entitled “Design for Children”. This course is a part of the first semester of your M.S. programme.

### **Course Objective and Course Structure**

Course Objective and Structure of the course has been explained earlier in the tutor guide. Please go through the details carefully and follow them accordingly.

### **Part Time Tutors/Lecture Sessions**

Students are allocated a part time tutor. The name and address of your tutor will be provided to you. The tutor will help and guide you in studying the books and conducting activities related to study units. You are expected to take full advantage of the tutor knowledge and experience. These tutors are also responsible for marking your assignments.

Make all efforts to complete your written assignment according to the prescribed schedule and try your best to attend all the study sessions according to the timetable provided to you.

Schedule for lecture sessions are arranged on fortnightly basis. The specific dates in the form of tutorial schedule are being provided separately. Try to attend these meetings regularly to get proper guidance from your tutor.

### **Assignments**

The course includes two assignments, which are compulsory for successful completion of the whole course. Each assignment is of 100 marks and out of these, students obtaining 50 marks will be declared pass.

**Assignment No. 1.** It is a theory based assignment and must reach your assigned tutor before the due date.

**Units 1-7 are included in your assignment.** The schedule of submitting the assignment is provided separately. The tutor will send the marked assignment back to the students within 15 days, if you do not receive the marked assignment after 15 days please contact your tutor or regional office of the Allama Iqbal Open University.

The **Assignment No. 2** is research based. You should start working on this assignment in the beginning of semester to complete it in time for write up and presentation in workshop well in time. **Last two units are left out to adjust the study period but you must prepare them for your final exams.**

**Note:** *Do not forget to dispatch the prescribed forms along with the complete assignments.*

### **Method of Study:**

Study period of 16 weeks has been allocated for studying this course through distance learning, whereas 17<sup>th</sup> and 18<sup>th</sup> weeks are kept for general assessment and for final examination.

<b>S. No</b>	<b>Units</b>	<b>Assignments</b>	<b>Study period</b>
1	1-2		4 weeks
2	3-6		4 weeks
3	7	Assignment 1	2 weeks
4	8-9		2 weeks
5	Revision	Assignment 2	4 weeks
6	Preparation for examination		2 weeks

You are expected to spend four weeks on studying first two units. This will help to improve your reading speed and get familiar with the contents of the units. The next three units, 3 to 6, will become easier for you and you will be able to study them in comparatively less time. You can spend four weeks on studying these four units, during the ninth week you can study unit No. 7 and during the tenth week, you can complete your first assignment and dispatch to your tutor.

### **Study Projects**

You are also advised to address the questions at the end of chapters and share your views in the tutorial sessions.

Unit 8 to 9 can be studied during 11<sup>th</sup> and 12<sup>th</sup> week respectively and you can start working on your assignment No. 2 in the 6<sup>th</sup> week and complete it along with the revision of your book during the weeks 13-16. The last two weeks can be kept for examination and its preparation.

### **Workshop**

Workshop will be arranged for three days. Schedule of the workshop and venue will be sent to the students during the study period. Workshop will cover some of the lectures of the specialist on important topics. The tutor will provide guidance for the workshop. Attendance in workshop is **compulsory** for the students.

### **Final examination**

At the end of the course, there will be a final examination. All the students will be expected to take this examination in examination halls, especially established for this purpose.

For any queries, you can write to the course coordinator. Suggestions for improvement will also be welcomed. We wish you all the best.

Regards,

**Dr Nomana Anjum**  
Programme Coordinator  
Chairperson

**ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD**  
**(Department of Home and Health Science)**

**WARNING**

- 1. PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.**
- 2. SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

**Course: Design for Children (7778/1592)**  
**Level: MS**

**Semester: Spring, 2014**  
**Total Marks: 100**

*Note: Answer the following questions. All questions carry equal marks.*

**ASSIGNMENT No. 1**

- Q. 1 Explain why the location is everything for child care centre. Discuss how centre can benefit the community. **(10)**
- Q. 2 Discuss the issues related to building and site design for daycare centre in detail. **(20)**
- Q. 3 What type of building materials may be used for interior and exterior of child care building. **(10)**
- Q. 4 Critically analyze the steps involved in integrating the indoor and outdoor child care building. **(20)**
- Q. 5 What type of doors and windows are needed to meet all safety fire, and functional requirements. **(10)**
- Q. 6 What is zoning. Explain the protected zones and movement from public to private zones. **(10)**
- Q. 7 Discuss why the teaching of environmentally conscious ways of living is important for children and how it can be accommodated in child friendly buildings? **(10)**
- Q. 8 What measures must be taken while designing and selecting any heating and cooling system for new child care centre explain? **(10)**

## ASSIGNMENT No. 2

### Project Options

Select any one of the following research topics.

#### Research topics

1. **Make an observational study of a pre-school nursery or day care center in your area to study”**
  - ◆ Spatial Organization
  - ◆ Activity areas/learning opportunities
  - ◆ Furniture/Furnishings
  - ◆ Colour in Interiors
  
2. **Write an analytical report comparing the needs of children in relation to available facilities.**
  - ◆ Select at least two different nurseries to compare the spatial organization in relation to children need.
  - ◆ Re-design the layout of the two selected nurseries for better spatial arrangement to meet children and staff needs. Show existing interior with photograph and draw sketches/diagrams for re-designed plan.
  
3. **Interview at least three persons who are running the day care center or nurseries to assess:**
  - ◆ Awareness of children’s developmental needs.
  - ◆ Consultations with child development experts to design the interiors.
  - ◆ Consultation with designers for spatial arrangements and selection of furniture & furnishings.

Write an analytical report covering the criteria of good nursery/daycare environment. Use observation and structured interview technique. Attach copies of questionnaire and other tools used for this study.

#### General instructions

1. This assignment is of practical nature, you have to prepare a research report and present it in the workshop prior to the final examination (you do not need to send this to your tutor before the workshop).
2. The workshop component is mandatory for all the students. You cannot sit in the final examination without completing this project and presenting in the workshop.
3. This assignment requires through review of literature to develop the conceptual framework before conducting the field research for this project, which also needs to be incorporated in the report systematically.

4. You can select any of the given topics of your project; the field visits should preferably be based close to your home address.
5. Include the following sections in your report:
  - a) Introduction and objectives of the study project
  - b) Methodology for research
  - c) Review of literature
  - d) Data analysis with statistics and graphical/visual representations
  - e) Conclusions/suggestions
  - f) Appendices and bibliography
6. Prepare three copies of this assignment, one for yourself, one for the tutor and the third one for the Department of Home and Health Sciences (AIOU) for record. Attach three assignment forms with this assignment as for assignment one.
7. As the student is supposed to do a presentation in the workshop to the resource person and course mates, he should prepare a PowerPoint Presentation.
8. You are advised to consult source material frequently. If you need any guidance you may contact your tutor or write to the Department of Home and Health Sciences (AIOU)

### **MARKING GUIDE**

It is expected from the tutors that they will mark the assignments carefully and will follow the uniform marking standards for all the students. They are also advised to guide the students for their strengths and weakness and also to give guidelines for better performance in future.

For theory based assignment tutors are requested to follow the marks division as indicated on the assignment that is eight questions, making a total of hundred. The questions that are further divided into parts a, b, etc. accompany a further division of marks as well.

For research based assignment the allocation of marks is indicated as under:

Research Activity .....	50 Marks
Report Writing.....	25 Marks
Presentation in the Workshop.....	25 Marks

You are requested to stick to the guidelines provided to maintain the standardization and uniformity.