

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ISSUES IN WORKPLACE DESIGN (1589)

Supplementary Material
Spring, 2013

ALLAMA IQBAL OPEN UNIVERSITY
Department of Home and Health Sciences

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

Course: Environmental Issues in Workplace Design (1589)
Level: Post-Graduate

Semester: Spring, 2013
Credit: 4 (3+1)

CONTENT LIST

This study pack includes the following items:

1. Course Books
2. CD
3. Course Outlines (Units1–9)
4. Tutor Guide
5. Student Guide
6. Assignments (1 & 2)
7. Assignment Forms
8. 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.

Tutor Guide

Dear Tutor,

On behalf of AIOU and course team of “Environmental Design Programme,” I welcome you as a tutor to the “Environmental Issues in Workplace Design” 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.

Introduction to Course

The world is experiencing an era of transformation and nowhere is change being felt more than in the work environment. Flexibility, productivity, creativity, team working are the new buzzwords, which appear in any discourse on office environment. New, innovative, flexible working methods and environment have been introduced such as hot-desking, hoteling etc. as well as the re-examination of the open plan workspaces with which we have become familiar.

As the workplace design is going through revolution to accommodate the technological revolution, employees or office users are feeling its impact; it is both physical and psychological. The course “Workplace Design: Physical and Psychological Aspects” is concentrating on current issues affecting employees or users due to the new ways of working in offices.

Objectives

This course aims at:

- Introducing the importance of user participation in the workplace design
- Enhancing the environmental quality of offices for productivity and creativity
- Environmental up lift of offices to have improved health and well-being for consumers/office users.

Course Structure

The course “Environmental Issues in Workplace Design” is particularly designed for building design professionals to outline the environmental design issues pertinent to workplace design.

This is half credit course and comprises nine units (The course outline and chapter/unit wise distribution is explained below for your reference).

Unit No. 1 Workplace Design-Historical Perspective is an introductory unit to acquaint you with the historical development of offices/workplaces to portray the working conditions from 1900–1950. This unit also highlights the transformation in the workplace design, due to technological revolution and introducing the new ways of working and its particular environment.

Unit No.2 Workplace Design and Human Behaviour establishes relationship between human behaviour and workplace design and introduces the importance of psychological information in the design process.

Unit No.3 Environmental Quality in Offices-Physical Aspects covers the physical aspects such as thermal comfort, lighting, furniture, furnishings and office facilities.

Unit No.4 Environmental Quality in Offices-Psychological Aspects deals with psychological aspects including privacy, interpersonal communication, individual control and decision making.

Unit No.5 Technological Outburst and New Environment for Working particularly deals with dynamics of change in work environment and its impact on environmental systems and workplace design.

Unit No.6 Environmental Health in Buildings describes the increased recognition for health and safety issues in building design and warns against the sick building syndrome due to building design faults and inadequacies.

Unit No.7 Workplace Design - Healthy and Productive Environment develops the direct relationship between building design and well-being of employees which ultimately promotes productivity and creativity.

Unit No.8 Stress and Changing Nature of Work explains the rapidly changing nature of work and its impact on employees in the form of unmanageable stress. The unit also guides on primary, secondary and tertiary level interventions for stress management.

Unit No.9 Workplace Design and role of Designer/Architect identifies the significant role that designer of a workplace can play to improve the current state by user involvement in the design brief for designing better workplaces in future.

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 students may need help in developing professional attitudes as well as understanding the facts about design and environmental psychology.

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 workshops are the major source of link between tutor and the student. Therefore, it is important to offer your comments through these assignments. Express your views in such a way that the student is not discouraged, hurts or feels depressed after going through your comments.

You are also 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.

Regards,

Dr. Nomana Anjum
Associate Professor
Programme/Course Coordinator
Chairperson

Student Guide

Dear Student,

Assalam-o- Alaikum!

We welcome you to the M. Sc Environmental Design Course entitled “Environmental Issues in Workplace Design”. This course is part of the third semester of your M. Sc. programme.

Course Objectives and Course Structure

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

Part Time Tutors

Every student is 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 is arranged on fortnightly bases. The specific dates in the form of lecture sessions schedule is 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 40 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 the 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.

Methods of Study:

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

Sr. No.	Units	Assignments	Study period
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 the 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/units and share your views in the tutorial sessions.

Unit 8 to 9 can be studied during 11th and 12th week respectively and you can start working on your assignment No.2 in the 6th 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 the 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

Associate Professor

Programme/Course Coordinator

Chairperson

Workplace Design: Physical and Psychological Considerations

Reference Books

- *Workspace Strategies: Environment as a Tool for Work, Jacqueline C. Visher*
- *Creating the Productive Workplace by Derek Clements Croome*
- *The Total Workplace by Franklin Becker*
- *Environmental Quality in Offices by Jacqueline C. Visher*

Unit 1: Workplace Design-Historical Perspective

- 1.1 Early Workplace Development
- 1.2 Working Conditions 1900–1950
- 1.3 Workplace Revolution

Unit 2: Workplace Design and Human Behaviour

- 2.1 Relationship between Workplace Design and Human Behaviour
- 2.2 Importance of Psychological Information
- 2.3 Design stages and Psychological Information
- 2.4 Emotions and the Environment
- 2.5 Organizational Factors in Workplace Design

Unit 3: Environmental Quality in Offices-Physical Aspects

- 3.1. Ambient Environment
- 3.2 Office Space
- 3.3 Furniture & Furnishings
- 3.4 Storage
- 3.5 Interior Surfaces
- 3.6 Facilities
- 3.7 Health, Safety and Security

Unit 4: Environmental Quality in Offices-Psychological Aspects

- 4.1 Human Behaviour and Psychological Process
- 4.2 Privacy
- 4.3 Interpersonal Communication
- 4.4 Individual Control
- 4.5 Decision Making
- 4.6 Job Satisfaction

Unit 5: Technological Outburst and New Environment for Working

- 5.1 The Dynamics of Change
- 5.2 Accommodating Dynamics of Change
- 5.3 Impact of Change on Environmental Systems

Unit 6: Environmental Health in Buildings

- 6.1 Sick Building Syndrome-Causes and Recommendations
- 6.2 Sick Building or Sick Organization
- 6.3 The Constructs of a Health organization
- 6.4 A Multi Disciplinary Approach to the Assessment of Workplace Related Illnesses

Unit 7: Workplace Design-Healthy and Productive Environment

- 7.1 Workplace Design and Well-being
- 7.2 Workplace Design and Creativity
- 7.3 Indoor Environment and Productivity
- 7.4 Assessment and Management of Productivity
- 7.5 The Economics of Productivity

Unit 8: Stress and Changing Nature of Work

- 8.1 Stresses as a Source of Change
- 8.2 Cost of Mismanaged Change
- 8.3 Diagnosing Occupational Stress
- 8.4 Management of Stress in the Workplace
- 8.5 Primary Secondary and Tertiary level Interventions-Stress Management Strategies

Unit 9: Workplace Design and role of Designer/Architect

- 9.1 Implications of Design Brief
- 9.2 User Participation
- 9.3 Accommodating Change in Working Environments with New Design Concepts
- 9.4 Future of Workplace Design

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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: Environmental Issues in Workplace Design (1589) **Semester:** Spring, 2013
Level: Post-Graduate **Total Marks:** 100
Credit: 4 (3+1)

ASSIGNMENT No. 1

(Units 1–7)

Note: Attempt all questions.

- Q. 1 Trace the history of workplace development, depicting the improvements in the prevailing environmental conditions. (20)
- Q. 2 (a) Analyze the relationship between workplace design and human behaviour
(b) How indoor work environment supports productivity? (10)
- Q. 3 Analyze the state of environmental quality of offices in relation to your own experience for the following physical aspects:
(a) Day lighting
(b) Space adequacy and furniture quality (15)
- Q. 4 (a) How technological revolution is affecting the design of offices in Pakistan?
(b) Do you think designers are successfully accommodating the new ways of working with manageable design solutions? (15)
- Q. 5 Discuss the significance of health, safety and security in offices. Do we have adequate provision? Relate with your experience. (10)
- Q. 6 (a) How building design can promote creativity of employees?
(b) Discuss important feature for an
(i) an architectural practice
(ii) a graphic designers office
(iii) office of creative writer (15)
- Q. 7 What is the major contributor of "Sick Building Syndrome". Write an analytical account reviewing articles through the internet search. How we can control this in our architectural design. (15)

ASSIGNMENT No. 2

Units (1–9)

(Total Marks: 100)

Project Options

Select any one of the following topics.

- 1) **Select two large office buildings with at least 100 employees in each organization and assess the user satisfaction by interviewing at least 15 employees in each organization for:**
 - a) Thermal comfort features (heating, cooling, fresh air)
 - b) Lighting arrangement (daylight, artificial light, glare control)
 - c) Aesthetic quality of workspace.**Support your discussion with visuals.**
Suggest suitable solutions to resolve the shortcomings.

- 2) **Select two commercial buildings (such as shopping mall) or educational building (such as university/college) and assess the behaviour of various users by observation. Focus on the following questions:**
 - a) Is building layout fully supporting the required activities in an efficient manner?
 - b) Is the building designed with adequate health and safety features?
 - c) Are there some features of building that restrict users to do their work?**Support your discussion with visuals.**
Suggest suitable solutions to resolve the shortcomings.

- 3) **Select two different organizations of at least 50 employees and interview at least 10 employees in each one to assess the privacy arrangement. Concentrate on following:**
 - a) Aural privacy arrangement to maintain confidentiality
 - b) Visual privacy in case of open plane office.**Suggest suitable design solutions where office users are not satisfied with the existing arrangement.**
Review their privacy needs in relation to their job assignments.

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 it in the workshop.

3. This assignment requires thorough 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 for 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 field 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 (AIOU) addressed to the Programme Coordinator 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 transparencies or other illustrative material for effective 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 (AIOU).
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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 weaknesses 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 seven questions, each making a total of hundred.

For the 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.