

COURSE OUTLINE

Department & Faculty: Dept. of Built Environment Centre For Diploma Studies SPACE	Page : 1 of 6
Course Code : Building Maintenance (DDPF 2533) Total Contact Hours : 56 hours	Semester: I Academic Session: 2012/2013

Lecturer :
Room No. :
Telephone No. :
E-mail :
Synopsis : This subject consists of introduction to building maintenance management system, cause and defects on building components and material and building defects. It also explains the maintenance approach and functions, planning and develop maintenance system, building surveys works and procedures, organization of building maintenance management and preventive maintenance.

LEARNING OUTCOMES

By the end of the course, students should be able to:

No.	Course Learning Outcome	Programme Learning Outcome(s) Addressed	Taxonomy/KI Level	Assessment Methods
1.	Describe and apply concepts of building maintenance management system.	PO1	C3	Test and Final Exam
2.	Demonstrate basic concepts of building maintenance to solve the building maintenance problems.	PO3	P3 CTPS1	Project
3.	Develop qualities of an effective team player and reporting information.	PO5	A3 TS1-TS2	Group Presentation

STUDENT LEARNING TIME

Prepared by: Name: Signature: Date:	Certified by: (Course Panel Head) Name: Signature: Date:
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Teaching and Learning Activities	Student Learning Time (hours)
A. Face-to-face Learning	
1. Lecture	28
2. Tutorial	14
3. Student Centered Learning	14
B. Self Directed Learning	
1. Non face-to-face : project	41.5
2. Revision	10
3. Assessment Preparation	7.5
C. Formal Assessment	
1. Continuous Assessment : test	2.5
2. Final Exam	2.5
Total	120

TEACHING METHODOLOGY

Lecture and Discussion, Co-operative Learning, Independent Study, Individual Assignment, Group Assignments

WEEKLY SCHEDULE

Week 1 : 1.0 INTRODUCTION TO BUILDING MAINTENANCE

Group's Project

- 1.1 Background introduction
- 1.2 Definition of building maintenance
- 1.3 Classification of building maintenance.
- 1.4 Building maintenance management System.
- 1.5 General principle of building design

Week 2 : 2.0 BUILDING DEFECTS

- 2.1 The types of building defect.
- 2.2 The several factors effecting building defect: humans factors, environmental factors etc.

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2.3 The cause and the types of building components defect

2.4 The cause and the types of materials defect

2.5 Building Maintenance Objectives

Weeks 3 : 3.0 BUILDING DEFECT

- Foundation
- Roof
- Staircase
- Wall
- Floor
- Structure

Weeks 4 : 3.0 BUILDING DEFECT

- Foundation
- Roof
- Staircase
- Wall
- Floor
- Structure

Weeks 5 : 4.0 BUILDING MAINTENANCE WORKS

4.1 Types of Building Maintenance Work:

- Planned Maintenance
- Unplanned Maintenance

4.2 Building Maintenance Method

4.3 Building Maintenance Approach and Practical

4.4 Function Of Building Maintenance

Weeks 6 4.0 BUILDING MAINTENANCE WORKS

4.1 Types of Building Maintenance Work:

- Planned Maintenance
- Unplanned Maintenance



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	4.2 Building Maintenance Method 4.3 Building Maintenance Approach and Practical 4.4 Function Of Building Maintenance •
Weeks 7 (Test 1: 15%) Submit Project	4.0 BUILDING MAINTENANCE WORKS 4.1 Types of Building Maintenance Work: <ul style="list-style-type: none"> • Planned Maintenance • Unplanned Maintenance 4.2 Building Maintenance Method 4.3 Building Maintenance Approach and Practical 4.4 Function Of Building Maintenance
Weeks 8	MID TERM BREAK
Weeks 9 Group Presentation	5.0 BUILDING MAINTENANCE SYSTEM PLANNING 5.1 Planning Levels 5.2 Maintenance Works Planning 5.3 Maintenance Time Management and Supervision 5.4 Financial and Budget Allocation <ul style="list-style-type: none"> • Building maintenance cost and expenses • Budget controlling and planning • Prepare report for budget allocation
Week 10 Group Presentation	: 5.0 BUILDING MAINTENANCE SYSTEM PLANNING 5.1 Planning Levels 5.2 Maintenance Works Planning 5.3 Maintenance Time Management and Supervision 5.4 Financial and Budget Allocation <ul style="list-style-type: none"> • Building maintenance cost and expenses • Budget controlling and planning • Prepare report for budget allocation

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Weeks 11 : 5.0 BUILDING MAINTENANCE SYSTEM PLANNING

- Group Presentation**
- 5.1 Planning Levels
 - 5.2 Maintenance Works Planning
 - 5.3 Maintenance Time Management and Supervision
 - 5.4 Financial and Budget Allocation
 - Building maintenance cost and expenses
 - Budget controlling and planning
 - Prepare report for budget allocation

Weeks 12 : 6.0 BUILDING SURVEY PROCEDURE

- Group Presentation**
- 6.1 Introduction
 - 6.2 Tools and Equipment For Site Inspection
 - 6.3 Survey Procedure And Site Inspection
 - 6.4 Site Inspection List
 - 6.5 Survey and Site Inspection Report

Week 13 : 7.0 ORGANIZATION ON BUILDING MAINTENANCE MANAGEMENT

- 7.1 Organization Structure
- 7.2 Management Hierarchy
- 7.3 Communication
- 7.4 Human Factors

Weeks 14 : 7.0 ORGANIZATION ON BUILDING MAINTENANCE MANAGEMENT

- Test 2 (15%)**
Group Presentation
- 7.1 Organization Structure
 - 7.2 Management Hierarchy
 - 7.3 Communication
 - 7.4 Human Factors

Weeks 15 : 8.0 STANDARD MAINTENANCE SERVICES AND OPERATION



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- Group Presentation**
- 8.1 Standard Evaluation
 - 8.2 Life Cycle Of Components and Materials
 - 8.3 Maintenance Cycle
 - 8.4 Preventive Maintenance

REFERENCES : Main Reference:

1. Barrier Chatter and Peter Swallow (2007). "Building Maintenance Management". Blackwell Publisher.
2. "Ryan Cruzan (2009). Manager's Guide To Preventive Building Maintenance"
3. Bearnard Lawis and Richard Payant (2007) "Facilities Managers Maintenance Handbook". McGraw Hill.

GRADING

No.	Assessment	Number	% Each	BT	% Total
1	Project	1	15	P1, P3 CTPS1	15
2	Test	2	10	C1 – C3	20
3	Group Presentation	1	5	A1-A3 TS1-TS2	5
4	Final Exam	1	60	C1 – C3	60
	Overall Total				100