Course Specifications of:

Techniques of Building Maintenance and Restoration

Program(s) on which the course is given: Postgraduate Diploma- Maintenance and Restoration.

Compulsory or Elective element of program: Elective

Department offering the program: Architectural Engineerig

Academic year / Level: year/ 2014-2015

Date of specification approval:June 2012

1. Basic Information
2. Title: Techniques of Building Maintenance and Restoration Code: Arc 514
3. Credit Hours: 3 Lecture: 3 practical
4. Semester work: 120 Final Exam:90 Practical: 90 Total: 300
5. Professional Information

1- Overall aims of course:

By the end of the course the student will be able to

1. provide study which will be informed by, the forefront of both the academic and professional elements of maintenance and restoration.
2. provide a scientific, technical and commercial understanding of maintenance and restoration issues and practice.
3. recognize of the nature of maintenance and restoration through the integration of knowledge from history of architecture and conservation
4. enhance conservation techniques and restoration practice in the local context, through the development of new skills at a high level.

2- Intended learning outcomes of course (ILOs):

1. **Knowledge and understanding**

2.1.4 Explain the effect of professional practice on the environment and work towards its conservation and maintenance.

**b- Intellectual skills**

2.2.1 Discern and analyze the problems in Building Maintenance and Restoration

and categorize them according to their priority.

**c- Professional and practical skills**

2.3.2 Prepare professional reports.

**d- General and transferable skills**

2.4.1 Communicate effectively using different means.

2.4.5 Work in a group and manage time effectively

3- Contents

|  |  |  |  |
| --- | --- | --- | --- |
| Topic No. | Topic | No. of weeks | Total no. of hours |
| 1 | Restoration and maintenance of architectural elements in buildings | 1 | 3 |
| 2 | Restoration and maintenance of architectural elements in buildings | 1 | 3 |
| 3 | Restoration and maintained projects Time schedules | 1 | 3 |
| 4 | feasibility studies | 1 | 3 |
| 5 | Types of building maintained techniques | 1 | 3 |
| 6 | Types of building maintained techniques | 1 | 3 |
| 7 | Quizzes& defects repair in architectural buildings (stone, wood, masonry stucco, ceramics..)& Quizzes | 1 | 3 |
| 8 | Midterm Exam | 1 | 3 |
| 9 | Types of building maintenance / Restoration and maintenance of Architectural heritage | 1 | 3 |
| 10 | Types of building maintenance / Restoration and maintenance of Architectural heritage | 1 | 3 |
| 11 | Reuse of heritage buildings. | 1 | 3 |
| 12 | Project follow up | 1 | 3 |
| 13 | Project follow up | 1 | 3 |
| 14 | Submission and discussions | 1 | 3 |
| 15 | Oral exam | 1 | 3 |
| 16 | Final exam | 1 | 3 |
| TOTAL | | 16 | 48 |

4- Course Matrix

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| --- | --- | --- |
| ILO’s code number | Teaching/learning methods and strategies | Assessment methods and strategies |
| 2.2.4 | * Acquisition of core knowledge and understanding is achieved mainly through lectures, seminars, tutorials, directed reading, project work and independent study. | Assessment will be through individual coursework assignments, quizzes, oral discussions and reports. In addition final written examinations are given. The grades distribution system is shown in the curriculum table below. |
| 2.2.1 | * Analysis and problem‐solving skills are developed through tutorial/problem sheets and small group exercises. | Analysis and problem‐solving skills are assessed through oral and written examinations |
| 2.3.2 | Experiments demonstrations, and practical work. | Practical skills are assessed through projects write-ups, coursework exercises and reports, project reports and presentations. |
| 2.4.1  2.4.5 | * Presentations in annual seminars (compulsory to be attended by a panel of departmental staff and other students). * Attendance of workshops or conferences or internal seminars. | Project presentation |

5-Assessment schedule

Assessment 1 Assignmentson weeks 7-9-11-14

Assessment 2 Quizzes on weeks 7

Assessment 3 Midterm exam on week 8

Assessment 3 Oral exam on week 15

Assessment 4 Final exam on week 16

6- Weighting of assessments

20% Home assignments

10% Midterm exam

10% Quizzes

30% Oral examination

30% Final-term examination

100% Total

7- List of References

6.1 Essential books.

* Martin E. Weaver. Conserving Buildings: Guide to Techniques and Materials, Revised Edition. Wiley; Revised Edition edition (January 22, 1997).
* Jeffrey L. Erdly, Thomas A. Schwartz. Building Facade Maintenance, Repair, and Inspection. ASTM International. 2004.

8- Facilities required for teaching and learning

Lecture room equipped with overhead projector

Presentation board, computer and data show

Course coordinator: **professor dr./ khaled Abdelhadi .**

Course instructor:  **professor dr./** **khaled Abdelhadi**

Date 15 / 10 / 2013