Course Specifications of:

 Building Documentation and Monitoring

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

Compulsory or Elective element of program: Compulsory

Department offering the program: Architecture

Academic year / Level: Master of science year 2013 / 2012

Date of specification approval: 23-1-2012

1. Basic Information

Title: Building Documentation and Monitoring Code: Arc 626

Credit Hours: 3 Lecture: 3 Practical:

Semester work: 120 Final Exam:90 Practical:90 Total: 300

1. Professional Information

1- Overall aims of course:

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

* Provide a scientific understanding of Maintenance and Restoration issues and practice.
* Produce professional researcher to work in the field of Maintenance and Restoration..
* Provide study which will be informed by, the forefront of the academic elements of Maintenance and Restoration.
* Recognize of the nature of Maintenance and Restoration through the integration of knowledge from history of architecture and conservation.

 2- Intended learning outcomes of course (ILOs):

1. **Knowledge and understanding**

2.1.3 recognize the scientific developments in the area of Building Maintenance and Restoration.

2.1.5 List the principles and fundamentals of quality in professional practice related to the area of Building Maintenance and Restoration..

2.1.6 Define the basics and the ethics of scientific research.

1. **Intellectual skills**

 2.2.7 Make professional decisions in various professional contexts.

1. **Professional and practical skills**

2.3.1 apply basic professional and modern skills in the area of Building Maintenance and Restoration.

1. **General and transferable skills**

2.4.3 Assess him/her self and identify his/her own personal learning needs.

2.4.4 Use different sources for obtaining information and knowledge.

3- Contents

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| Topic No. | Topic | No. of weeks | Total no. of hours |
| 1 | Introduction | 1 | 3 |
| 2 | Principals and concepts of Architectural survey & documentation | 1 | 3 |
| 3 | modern documentation methods | 1 | 3 |
| 4 | modern documentation methods | 1 | 3 |
| 5 | Sustainability in Architecture | 1 | 3 |
| 6 | building elements and documentation requirements | 1 | 3 |
| 7 | techniques of monitoring and documentation of deterioration reasons & manifestations | 1 | 3 |
| 8 | Midterm exam | 1 | 3 |
| 9 | methods of monitoring cases of deterioration | 1 | 3 |
| 10 | methods of monitoring cases of deterioration | 1 | 3 |
| 11 | Structure stability and consolidation of materials. | 1 | 3 |
| 12 | Project follow up  | 1 | 3 |
| 13 | Project follow up  | 1 | 3 |
| 14 | Project follow up  | 1 | 3 |
| 15 | Submission and discussions  | 1 | 3 |
| 16 | Final exam | 1 | 3 |
|  TOTAL | 16 | 45 |

4- Course Matrix

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| ILO’s code number | Teaching/learning methods and strategies | Assessment methods and strategies |
|  2.1.3 / 2.1.5 / 2.1.6  |

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| Acquisition of core knowledge and understanding is achieved mainly through lectures, seminars, reading, project work and independent study cases |

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| Assessment will be through individual coursework assignments, oral arranged discussions about particular issues and criticism of design research. In addition to given final examinations.  |

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|  2.2.7  |

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| Analysis and problem solving skills are developed through tutorials, and projects’ design discussions  |

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| Design and research skills are assessed through student proposals for creative design concepts reflecting particular visionary creative ideas, and provide objec  |

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| 2.3.1 |

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| Projects demonstrations, practical work, practical based projects in selected particular sites, and visits for site analysis.  |

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| Practical skills are assessed through projects prepared concept designs and individual coursework assignments |

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| 2.4.3 / 2.4.4  |

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| Presentations of projects as well as seminars  |

 | Project presentation |

5- Assessment schedule

Assessment 1 Assignments on week’s 7-9-11-14

Assessment 2 Midterm exam on week 8

Assessment 3 Oral exam on week 15

Assessment 4 Final exam on week 16

6- Weighting of assessments

30% Home assignments

10% Midterm exam

30% Oral examination

30% Final-term examination

100% Total

7- List of References

 S. Vepřek, J. Patscheider, J. Elmer, Restoration and conservation of ancient artifacts: A new area of application of plasma chemistry, Kluwer Academic Publishers-Plenum Publishers , 1985.

 I. Michiels[†](http://www.sciencedirect.com/science/article/pii/S0730725X9900096X#AFF2), M. Verhoye[†](http://www.sciencedirect.com/science/article/pii/S0730725X9900096X#AFF2), J. Van Audekerke[†](http://www.sciencedirect.com/science/article/pii/S0730725X9900096X#AFF2),A. Van der Linden[†](http://www.sciencedirect.com/science/article/pii/S0730725X9900096X#AFF2), D. Van Dyck, Magnetic Resonance Imaging , 1999.

 - W.A. Thanoon, Lee Wah Peng and Mohd Salit: The Essential Characteristics of Industrialized Building System,-International Conference on Industrialized Building Systems, Kuala Lumpur, Malaysia,10-11 September, 2003.

8- Facilities required for teaching and learning

Lecture room equipped with overhead projector

Presentation board, computer and data show

Course coordinator: **Prof**.**Dr Ali ghalib.**

Course instructor: **Prof.Dr. Ali ghalib.**

Date 23 / 1 / 2012