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| **ISHIK UNIVERSITY FACULTY OF SCIENCE Department of INFORMATION TECHNOLOGY,2017-2018 Spring Course Information for** **IT 411 RESEARCH METHODOLOGY** |

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| --- | --- |
| **Course Name:** | RESEARCH METHODOLOGY |
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|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Code** | **Course type** | **Regular Semester** | **Theoretical** | **Practical** | **Credits** | **ECTS** |
| IT 411 | 2 | 7 | 3 | - | 3 |  |

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| **Name of Lecturer(s)-Academic Title:** | Mohammed Aldabagh - |
| **Teaching Assistant:** | -- |
| **Course Language:** | English |
| **Course Type:** | Non-area Elective |
| **Office Hours** | -- |
| **Contact:** | Email:mohamad.aldabagh@ishik.edu.iq Tel:07500000000  |
| **Teacher's academic profile:** | Phd in computer sciences  |
| **Course Objectives:** | This is an introductory course that covers the basics of undertaking research and writing a research paper. At each operational step in the research process it is required to choose from a multiplicity of methods, procedures and models of research methodology, which will help to best achieve the target research objectives. This subject is essential for the preparation of any research project including the graduation project (4th year). Thus, the last two lectures discuss how to prepare, implement and write the report for such project. |
| **Course Description (Course overview):** | This is an introductory course that covers the basics of undertaking research and writing a research paper. At each operational step in the research process it is required to choose from a multiplicity of methods, procedures and models of research methodology, which will help to best achieve the target research objectives. |
| **COURSE CONTENT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Hour** |               **Date**               | **Topic** |
| **1** | 3 | 4-8/2/2018 | Introduction to the subject, syllabus, marking scheme. |
| **2** | 3 | 11-15/2/2018 | Research objectives, definition & criteria, research characteristics. |
|  |  |  |  |
| **3** | 3 | 18-22/2/2018 | The research process, general steps, step 1: formulating the research problem, |
| **4** | 3 | 25/2-1/3/2018 | reviewing the literature, type of resources |
|  |  |  |  |
| **5** | 3 | 4-8/3/2018 | Types of publications and using them as resources, online digital libraries (paid and open-access), and preparing a literature review. |
| **6** | 3 | 25-29/3/2018 | Sample session, how to find resources |
|  |  |  |  |
| **7** | 3 | 1-5/4/2018 | Midterm Exam |
| **8** | 3 | 8-12/4/2018 | Step 3: developing the objectives. |
|  |  |  |  |
| **9** | 3 | 15-19/4/2018 | Step 4: preparing research design. |
| **10** | 3 | 22-26/4/2018 | Step 5: collecting data, with sample session. |
|  |  |  |  |
| **11** | 3 | 29/4-3/5/2018 | Step 6: Analyzing the data, with sample session. |
| **12** | 3 | 6-10/5/2018 | Step 7: generalization & Interpretation, Step 8: Writing (part 1). |
|  |  |  |  |
| **13** | 3 | 13-17/5/2018 | Step 8 (continued) Writing Issues: Plagiarism, Referencing, Citation, Style and Format. |
| **14** | 3 | 20-24/5/2018 | Preparing for final year project |
|  |  |  |  |
| **15** | 3 | 27-31/5/2015 | Final Exam |
| **16** | 3 | 3-7/6/2018 | Final Exam |
|  |  |  |  |
| **17** | 3 | 10-14/6/2018 |  |

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| **COURSE/STUDENT LEARNING OUTCOMES**

|  |  |
| --- | --- |
|  |  |
| **1** | Understand the idea behind research & its foundations. |
| **2** | Know what constitute a research from non-research. |
| **3** | Learn the logical steps to follow in the process of research |
| **4** | Prepare students for undertaking the graduation project (4th year). |
| **5** | - |

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| **COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES**(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced )

|  |  |  |
| --- | --- | --- |
|  | **Program Learning Outcomes** | **Cont.** |
| **1** | An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution | P |
| **2** | An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs | P |
| **3** | An ability to function effectively on teams to accomplish a common goal | A |
| **4** | An understanding of professional, ethical, legal, security, social, and economic issues and responsibilities | A |
| **5** | An ability to analyze the local and global impact of computing on individuals, organizations, and society | I |
| **6** | An ability to use current techniques, skills, and tools necessary for computing practice | I |
| **7** | An ability to use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies | I |
| **8** | An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems | I |
| **9** | An ability to effectively integrate IT-based solutions into the user environment |  |
| **10** | An ability apply problem solving skills, core IT concepts, best practices and standards to information technologies |  |
| **11** | An ability to identify and evaluate organizational requirements and current and emerging technologies |  |
| **12** | An ability to select, design, integrate and administer IT-based solutions into the organizational environment |  |

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| **Prerequisites (Course Reading List and References):** | NO Prerequisites |
| **Student's obligation (Special Requirements):** | Attend lectures, take quizzes & exams, assignment |
| **Course Book/Textbook:** | The subject is compiled from several resources |
| **Other Course Materials/References:** | Introducing Research Methodology, Uwe Flick, SAGE 2011. Research Methodology: A Step-by-Step Guide for Beginners, 3rd Edition. Ranjit Kumar, SAGE 2010. |
| **Teaching Methods (Forms of Teaching):** | Lectures, Practical Sessions, Presentation, Assignments, Case Studies |
| **COURSE EVALUATION CRITERIA**

|  |  |  |
| --- | --- | --- |
| **Method** | **Quantity** | **Percentage (%)** |
| Attendance | 1 | 5% |
| Quiz | 1 | 10% |
| Project | 1 | 15% |
| Midterm Exam(s) | 1 | 30% |
| Final Exam | 1 | 40 |
| **Total** | **100** |
| **Examinations:**Fill in the Blanks, Multiple Choices, Short Answers |  |  |

 |
| **Extra Notes:** |
| **ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activities** | **Quantity** | **Duration (Hour)** | **Total Work Load** |
| Course Duration (Including the exam week: 16x Total course hours) |  |  | 0 |
| Hours for off-the-classroom study (Pre-study, practice) |  |  | 0 |
| Assignments Mid-terms |  |  | 0 |
| Final examination |  |  | 0 |
| Other |  |  | 0 |
| **Total Workload** | **0** |
| **ECTS Credit (Total workload/25)** | **0** |

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**Peer review**

|  |  |  |
| --- | --- | --- |
| Signature: | Signature: | Signature: |
| Name: | Name: | Name: |
| Lecturer                                                                       | Head of Department                                                         | Dean |

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