**Ministry Of Higher Education and Scientific Research**



**Mustansiriya University/College of Science/Department of Computer Science)**

***Course Plan***

|  |  |
| --- | --- |
| **Course No.:**  | **Instructor**  Assist. Prof. Dr. Karim Q. Hussein |
| **Course Name:** **Mobile Cloud Computing** | **Time Division:**  **2hr Theoretical**  |
| **Course level : Ph.D.**  | **Semester & Year Second 2019-2020** |

**Course Description**

 This course presents a concentrated view about Mobile Cloud Computing (MCC) . Basically presents a scientific view bout Mobile Computing and Android environment , Mobile IP , Global System Mobility (GSM) concepts as well as a cloud computing . After these multiple approaches , MCC , Architectures , Algorithms and Application are covered in this course. MCC platforms and Models are presented with related algorithms and multiple case studies . Professional Issues of MCC are considered particularly MCC Security and Privacy. Finally some selected applications have been presented.

.

|  |
| --- |
|  **Course Intended Outcomes:**At the end of the course, students are expected to learn: |
| * Understand the basics of Mobile Computing (Framework , Operating System and Networking )
* Understand the basics of Cloud Computing.
* Understand the basics of Mobile IP address , Global System Mobility (GSM) .
* Understand the fundamentals of Mobile Cloud Computing.
* Understand the , Architectures , Algorithms , Models of MCC and Application of MCC
* Understand selected professional issues of MCC , Security and Privacy.
 |

# Course Outline:

|  |  |  |
| --- | --- | --- |
| **Week** | **Description depends on the Timing table(Theoretical)** | **Related practical Activities and Seminars**  |
| **1** | Mobile Computing Principles/ Introduction to Mobile Computing and Android environment  | Application Components :Android Application (XML + JAVA)Toast , Edit Text , Image View |
| **2** | Added Dimensions of Mobile Computing - Condition of the Mobile User - Architecture of Mobile Software Applications  | ImageButton ImageButton Attributes CheckBox CheckBox Attributes  |
| **3** | Mobile IP and Global System Mobility (GSM)  |   |
| **4** | Cloud Computing Fundamentals  |  |
| **5** | Mobile Cloud Computing ( Architecture , Algorithms and Application )  |  |
| **6** | Architecture of MCC  |  |
| **7** | Platforms of MCC |  |
| **8** |  Models of MCC  |  |
| **9** |  Selected Issues of MCC , Security |  |
| **10** | MCC Privacy |  |
| **11** | Application of MCC |  |
| **12** | Selected Case studies of MCC |   |
| **13** | Exams & Seminars |  |
| **14** | Discussions of projects and Seminars |  Final exam |

**Textbooks:**

|  |
| --- |
| 1. MOBILE CLOUD COMPUTING , Architectures, Algorithms and Applications , Debashis De , West Bengal University of Technology Kolkata, India , CRC Press is an imprint of the ,Taylor & Francis Group, an informa business , A CHAPMAN & HALL BOOK , 2016
 |

**Suggested references:**

|  |
| --- |
| 1. Mobile computing principles , Reza B'Far / Sixth Edition ,CAMBRIDGE UNIVERSITY PRESS
2. LECTURE NOTES ON CLOUD COMPUTING , Ch.Srividya Assistant professor, CSE A.Jayanthi Assistant professor, CSE S.Swarajya Laxmi Assistant professor, CSE B. Tejaswi Assistant professor, CSE
3. Handbook of Cloud Computing , Borko Furht · Armando Escalante Editors , Springer 2010
 |

**Marking:**

|  |  |
| --- | --- |
|  **First Semester** |  **Final Exam** |
|

|  |  |  |  |
| --- | --- | --- | --- |
|  **1st Exam** | **2nd Exam** | **Project & Seminar** | **Total Marks** |
| **10** | **10** | **10** | **30** |

 |   70 |

**Assignments and/or Projects:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assignment/Project** | **Description** | **Due Date** | **Marking** |
| Android Cloud Application | Professional Android Application Includes more than two Activities within cloud environment. |  20th April 2020 | 10 |

**Instructor information:**

|  |  |
| --- | --- |
| Instructor's Name: Assist. Prof. Dr. Karim Q. Hussein  | Office No.: **4** |
| E-Mail: karimzzm@yahoo.com |  |

**Lecturer Signature Chairman Signature**