**بسم الله الرحمن الرحيم**

**University: Diyala University**

**College: College of Engineering**

**Department:Electronic Engineering**

**Stage:Second**

**Lecturer name**

**Qualification: Ph.D.**

**Place of work: Electronic Dept.**

**Republic of Iraq**

**The Ministry Of Higher Education**

**& Scientific Research**



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| Course Instructor |  |
| E-mail | **mohselman@gmail.com** |
| Title | **Microprocessor** |
| Course Coordinator | **Dr. Mohammed S. Saleh** |
| Course Objective | **To teach 3rd class students the concepts of Microprocessor System Architecture** |
| Course Description | **The aim of this subject is to make the students ready to undestand and comprehend the scientific theories and their applications related to their field of the study.** |
| Textbook | **Microprocessor architecture,programming and applications with 8085/8080A by Ramesh Gaonkar** |
| Course Assessments | First semester with Lab | Second semester with Lab | Final Exam |
| **25 %** | **25 %** | **50 %** |
| General Notes | Type here general notes regarding the course |

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**Course Weekly Outline**

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| --- | --- | --- | --- | --- |
| Week | Date | Topics Covered | Lab. Experiment Assignments | Notes |
| 1 | **17/2/** | Definitions, computing logic , microprocessor development construction , fields of application. |  |  |
| 2 | **24/2/** | Definitions, computing logic , microprocessor development construction , fields of application. |  |  |
| 3 | **2/3/** | Numbers system, methods of numbering |  |  |
| 4 | **9/3/** | Numbers system, methods of numbering |  |  |
| 5 | **16/3/** | additional conversion methods between the number system, |  |  |
| 6 | **23/3/** | additional conversion methods between the number system, |  |  |
| 7 | **30/3/** | arithmetic operations |  |  |
| 8 | **6/4/** | Compute logic |  |  |
| 9 | **13/4/** | coding state |  |  |
| 10 | **20/4/** | Boolean algebra |  |  |
| 11 | **27/4/** | karnauff map method |  |  |
| 12 | **4/5/** | sequentional logic circuits |  |  |
| 13 | **11/5/** | Optimum using for sequention circuit in Microprocessor structure |  |  |
| 14 | **19/5/** | Optimum using for sequention circuit in Microprocessor structure |  |  |
| 15 | **6/1/** | Optimum using for sequention circuit in Microprocessor structure |  |  |
| 16 | **13/1/** | Optimum using for sequention circuit in Microprocessor structure |  |  |
| 17 | **17/2/** | Techniques, bipolar, schotcky bipolar |  |  |
| 18 | **24/2/** | integrated injection logic (I²L), |  |  |
| 19 | **2/3/** | tabled comparation |  |  |
| 20 | **9/3/** | tabled comparation |  |  |
| 21 | **16/3/** | Memory, type of semiconductor memory |  |  |
| 22 | **23/3/** | Memory, type of semiconductor memory |  |  |
| 23 | **30/3/** | Memory, type of semiconductor memory |  |  |
| 24 | **6/4/** | data save methods arrangement |  |  |
| 25 | **13/4/** | timing, instructions groups, architecture of bipolar wafers |  |  |
| 26 | **20/4/** | Software, accumulating languge, algorithms |  |  |
| 27 | **27/4/** | Microprogramming Control |  |  |
| 28 | **4/5/** | Control memory |  |  |
| 29 | **11/5/** | Address sequencing |  |  |
| 30 | **19/5/** | Design of control unit |  |  |

**INSTRUCTOR Signature: Dean Signature:**