**Course Description Form**

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| 1. Course Name: | | | | | | | | |
| ElectronicI | | | | | | | | |
| 1. Course Code: | | | | | | | | |
| WBM-21-07 | | | | | | | | |
| 1. Semester / Year: | | | | | | | | |
| Semester | | | | | | | | |
| 1. Description Preparation Date: | | | | | | | | |
| 2024-03-19 | | | | | | | | |
| 1. Available Attendance Forms: | | | | | | | | |
| presence in the classroom | | | | | | | | |
| 1. Number of Credit Hours (Total) / Number of Units (Total) | | | | | | | | |
| 75 Hours / 3 Units | | | | | | | | |
| 1. Course administrator's name (mention all, if more than one name) | | | | | | | | |
| Name: Ali Mohammed Abd alsada  Email: ali.mohammed@uowa.edu.iq | | | | | | | | |
| 1. Course Objectives | | | | | | | | |
| **Course Objectives** | | | | The importance of studying electronic material is to focus and understand all the simple elements  Basic by knowing its internal structure, the badge is manufactured from it, down to how  Dealing with it, what its functions are, and how to connect it in the correct way can  Benefit from these elements and also understand mathematical equations and relationships  Specific to each electronic element through careful and careful analysis  Suitable description for use in experimenting with these elements practically in the laboratory  Except for her.   * **.** | | | | |
| 1. Teaching and Learning Strategies | | | | | | | | |
| **Strategy** | | 1- Enabling the student to demonstrate real knowledge of electronic elements during the academic stage.  2- Understanding the rules and foundations upon which each electronic element is built.  3- Learn and understand ways to connect electronic elements to each other to perform different tasks.  4- Identify the applications of electronic science and its importance in practical life.  5- Understanding the mathematical rates and relationships for each electronic element. | | | | | | |
| 1. Course Structure | | | | | | | | |
| **Week** | **Hours** | | **Required Learning Outcomes** | | **Unit or subject name** | | **Learning method** | **Evaluation method** |
| 1 +2+3 | 9 | | Diodes | | The chemical structure of the transistor, its types, properties, mathematical equations, examples, and practical applications | | Lectures presented in PDF format | Daily exams + homework assignments + monthly exams |
| 4+5 | 6 | | Zener diode | | The chemical structure of the transistor, its types, properties, mathematical equations, examples, and practical applications | | Lectures presented in PDF format | Daily exams + homework assignments + monthly exams |
| 6+7 | 6 | | Rectifier and clipper | | The function of the rectifier and clipper, methods of connecting them, and examples | | Lectures presented in PDF format | Daily exams + homework assignments + monthly exams |
| 8+9+10 | 9 | | transistor | | Its types, applications, and examples of all types | | Lectures presented in PDF format | Daily exams + homework assignments + monthly exams |
| 11+12+13 | 9 | | DC Analysis for transistor | | Learn how to analyze a transistor with direct current sources and understand mathematical equations and apply them with examples | | Lectures presented in PDF format | Daily exams + homework assignments + monthly |
| 14+15 | 6 | | AC Analysis for transistor | | Learn how to analyze a transistor with alternating current sources and understand mathematical equations and apply them with examples | | Lectures presented in PDF format | Daily exams + homework assignments + monthly |
| 1. Course Evaluation | | | | | | | | |
|  Daily exams with practical and scientific questions. ‏   Participation scores for difficult competition questions among students   Establishing grades for environmental duties and the reports assigned to them   Semester exams for the curriculum, in addition to the mid-year exam and final exam | | | | | | | | |
| 1. Learning and Teaching Resources | | | | | | | | |
| Required textbooks (curricular books, if any) | | | | | | Electronic devices and circuit theory, Robert L. Boylestad Louis Nashelsky | | |
| Main references (sources) | | | | | | • College library to obtain additional sources for the academic curricula  • Check scientific websites to see recent developments in the subject | | |
| Recommended books and references (scientific journals, reports...) | | | | | | All reputable scientific journals that are related to the broad concept of electronic theories and their results | | |