**Course Description Form**

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| 1. Course Name:
 |
| ElectronicII |
| 1. Course Code:
 |
| WBM-22-07 |
| 1. Semester / Year:
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| Semester |
| 1. Description Preparation Date:
 |
| 2024-03-19 |
| 1. Available Attendance Forms:
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| presence in the classroom |
| 1. Number of Credit Hours (Total) / Number of Units (Total)
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| 75 Hours / 3 Units |
| 1. Course administrator's name (mention all, if more than one name)
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| Name: Ali Mohammed Abd alsadaEmail: ali.mohammed@uowa.edu.iq |
| 1. Course Objectives
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| **Course Objectives** | The importance of studying electronic material is to focus and understand all the simple elementsBasic by knowing its internal structure, the badge is manufactured from it, down to howDealing with it, what its functions are, and how to connect it in the correct way canBenefit from these elements and also understand mathematical equations and relationships Specific to each electronic element through careful and careful analysisSuitable description for use in experimenting with these elements practically in the laboratory Except for her.* **.**
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| 1. Teaching and Learning Strategies
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| **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
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| **Week**  | **Hours**  | **Required Learning Outcomes**  | **Unit or subject name**  | **Learning method**  | **Evaluation method**  |
| 1 +2+3 | 9 | JFET Transistor | 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 | MOSFET Transistor | 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 | AC Analysis for FET Transistor | Analysis of alternating current using the transistor with examples for all networks | Lectures presented in PDF format | Daily exams + homework assignments + monthly exams |
| 8+9+10 | 9 | Amplifiers | Its types, applications, and examples of all types  | Lectures presented in PDF format | Daily exams + homework assignments + monthly exams |
| 11+12+13 | 9 | oscillators | Explaining how to create an oscillator and the mathematical equations for each type, in addition to examples of each type | Lectures presented in PDF format | Daily exams + homework assignments + monthly |
| 14+15 | 6 | Diac and Triac | Understand the composition of these elements, their working principle, how to connect them, and their uses | Lectures presented in PDF format | Daily exams + homework assignments + monthly |
| 1. Course Evaluation
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|  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
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| 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 |