

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the program specification.

1. Teaching Institution	Al- Mansour University College
2. University Department/Centre	Communication Engineering Department
3. Course title/code	Electronic Physics
4. Programme(s) to which it contributes	
5. Modes of Attendance offered	Weekly – Lectures
6. Semester/Year	2020 – 2021 (First Semester)
7. Number of hours tuition (total)	30 Hours.
8. Date of production/revision of this specification	26- 4 - 2021
9. Aims of the Course	
Introducing the subject of electronic physics and its various methods used in solving various electrical problems.	

10- Learning Outcomes, Teaching ,Learning and Assessment Methode
A- Knowledge and Understanding A1. Understanding the topic of semiconductors. A2. Identify electronic equipment manufactured from semiconductors. A3. Linking previous knowledge to applied electronic circuits. .
B. Subject-specific skills B1. Training the student to deal with different situations in electrical in general. B2. Training the student on modeling practical issues related to electronic circuits.
Teaching and Learning Methods
1- Theoretical lectures with solving various practical examples. 2- Homework.
Assessment methods
1- Assessment of class exercises 2- Evaluation of extra-curricular exercises 3- Semester exams
C. Thinking Skills C1. Training students on the behavior of the scientific approach in investigation and research. C2. Students get scientific conclusion about dealing with different issues and situations.
Teaching and Learning Methods
Theoretical lectures with related seminars.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Enable the student to know the topic of semiconductors and electronic circuits and link the two branches with each other.

D2. Enable the student to obey the foundations he has received so that he can apply them in different aspects of life.

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1 - 2	4	Atomic Structure Fundamental	Atomic Structure	Theoretical Lectures	Exams and class assessment
3 - 4	4	Semiconductors Fundamentals	Semiconductors	Theoretical Lectures	Exams and class assessment
5 - 6	4	Diodes Fundamentals	Diodes	Theoretical Lectures	Exams and class assessment
7 – 8	4	Diode Characteristic Curves	Diode Characteristics	Theoretical Lectures	Exams and class assessment
9 - 10	4	Principles of Ideal Diode and Diode Model	Ideal diode and diode model	Theoretical Lectures	Exams and class assessment
11- 12	4	Applications in D.C. circuits	D.C. Applications	Theoretical Lectures	Exams and class assessment
13-14	4	Fundamentals of Alternating Voltages	A.C. Voltage	Theoretical Lectures	Exams and class assessment
15	2	Applications of alternating circuits	A.C. Applications	Theoretical Lectures	Exams and class assessment

12. Infrastructure

Required reading:

- CORE TEXTS
- COURSE MATERIALS
- OTHER

Semiconductor Devices, by: Tocci