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 programme specification.

1. Teaching Institution	Baghdad university
2. University Department/Centre	Faculty of Engineering/ Biomedical Engineering Department
3. Course title/code	Digital Electronic Engineering
4. Programme(s) to which it contributes	BSc. in Engineering
5. Modes of Attendance offered	Weekly attendance
6. Semester/Year	Academic Semester
7. Number of hours tuition (total)	30hrs. Theoretical
8. Date of production/revision of this specification	
9. Aims of the Course	
The course will introduce basic digital Electronics, concepts, including: devices, network, architecture, reference, models, layering, service, interface, multiplexing, switching and standards. An overview of digital communication to identify all electronic devices (design, analysis, operation) and their applications and Topics covered in this course include, Specify FETS, operational amp.	

10· Learning Outcomes, Teaching ,Learning and Assessment Method
Knowledge and Understanding A1. Understand the purpose of digital Electronics concepts, principles, design issues and techniques. A2. Understand and contrast between different types of Electronic A3. Understand how to describe the best using in the active systems and what can be the future applications.
B. Subject-specific skills B1. Possessing a strong technical background as well as analytical and problem solving skills. B2. B3.
Teaching and Learning Methods
Lectures
Assessment methods
Written exams
C. Thinking Skills C1. Ability to conduct standard tests and measurements; to conduct, analyse and interpret experiments; and to apply experimental results to improve processes. C2.
Teaching and Learning Methods
Tutorials
Assessment methods
Homework and written Assignment

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

D1. Ability to function effectively as a member or leader on a technical team.

D2. Contribute in a variety of technical roles within the electronics and high-tech industry

D3.

D4.

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
16	2	SCR type characteristic		Lecture	Discussion
17	2	SCR trigger circuit		Lecture	Discussion
18	2	SCR application		Lecture	Written Quiz
19	2	Multistage systems		Lecture	Discussion
20	2	Multistage systems & special amplifiers		Lecture	Discussion
21	2	Large signal amplifiers (power transistors)		Lecture	Discussion
22	2	power transistors, class A			
23	2	power transistors, class A transformer coupled		Lecture	Discussion
24	2	power transistors, class B(push – pull)		Lecture	Discussion
25	2	BJT&FET frequency response		Lecture	Discussion
26	2	The operational amplifier as an electrical circuit		Lecture	Discussion
27	2	Operational applications		Lecture	Discussion
28	2	Frequency Response of BJT Transistor		Lecture	Discussion
29	2	Frequency Response of FET Transistor		Lecture	Discussion
30	2	**second semester exam**		Lecture	Discussion

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	**1.** Robert Boylestad , Louis Nashelsky , 2010 , Electronic Devices and Circuit Theory ,Pearson International Edition , Ltd. London , ISBN-13: 978-0-13-606463-3 **2.** James Bignell , Robert Donovan , 2007 , Digital Electronics , Thomson Delmar Learning , Printed in United States Of America , ISBN : 1418020265 **3.** Digital Electronics principles & applications , 2008 , the Mc graw-Hill companies , Toheim Roger , Inc. ,1221 Avenue of Americas , New York , NY 10020 , ISBN: 978-0-07-312634-0
Special requirements (include for example workshops, periodicals, IT software, websites)	
Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions	
Pre-requisites	High school degree or equivalent degree according to the regulations of the Ministry of Higher Education and Scientific Research in Iraq.
Minimum number of students	
Maximum number of students	