# Course Memo (EEE 232) Electronics - II

Fall 2014

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This document describes the course *EEE 232 Electronics – II, 4 (3+1)* credit hours. Any changes or deviations from this document will be communicated from time to time.

## 1. General Information

## 1.1. Pre- Requisite

The pre-requisite for this course is *Electronics-I (EEE 231)*. All those who had not passed that course cannot register for this course.

#### 1.2. Course Literature

Electronic Devices and Circuit Theory by Robert L. Boylestad, 8<sup>th</sup> Edition. Electronic Devices and Circuits by Theodore F. Bogart, 2<sup>nd</sup> Edition.

## 1.3. Course Responsible

Mr. Muhammad Tilal (Lecturer & Examiner) Contact #: +92-57-9316330-1 Ext: 289.

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**Office:** Lab Room, DLD/MP Lab Department of Electrical Engineering

CIIT Attock, Pakistan.

**Consultation Time:** Will be determined later.

Mr. Hassan Saeed Qazi (Lab Eng. and Examiner)

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Office: ECA/Electronics Lab

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CIIT Attock, Pakistan.

Consultation Time: Will be determined later.

## 1.4. Course Home Page

All the information regarding the course will be updated on the course homepage. http://electronics-2.weebly.com/

## 2. Aims and Objectives

#### 2.1. Aims

The aim of this course is to introduce the students to the advanced concepts of electronics. The main objective of this course is to understand and implement the advanced electronic circuits such as amplifiers etc with the help of theoretical and practical problem solving.

It is required from the students to understand the analog electronic circuits which in turn are used as the building blocks of the larger and more complex systems.

## 2.2. Learning Outcomes

At the end of the course, student is expected to understand

- Small signal equivalent circuit models, differential amplifiers & Op amps.
- Detailed analysis of Op amps.
- Stability theory and s domain analysis.
- Different types of filters.
- The structure and working of different classes of power amplifiers.
- The structure and working 555 timer IC & regulator IC.

## 3. Lectures

The objective of the lectures is to highlight the most important parts of the course, give a basic understanding of the theory, perspective and applications of electronics. It is not necessary to cover all the parts in complete details and the lecturer will try to keep the learning focused.

## 4. Laboratory

Details for the laboratory work will be communicated during the initial laboratory sessions.

#### 5. Attendance

According to the CIIT policies, it is mandatory for every student to maintain an attendance of 80 %. If any student fails to attend the 80 % classes by the end of semester, he/she will not be allowed to take the final examination.

# 6. Examination

Every student will be examined on the basis of combination of different criteria, details of which are listed in the table below. Dates for all the examinations except quizzes will be announced in advance. Terminal examination will cover the whole course.

Criteria	% of Total Marks	Count
Sessional # 1	10%	01
Sessional # 2	15%	01
Quizes	15%	06
Assignments	10%	04
Final Exam	50%	01

As a general rule, an erroneous, incomplete or badly motivated answer will lead to the point reductions to a minimum of 0 points for each question. Computational errors that do not lead to the unreasonable results generally give smaller reductions than errors on fundamental principles. All the exams are mandatory. The purpose of the all the exam problems is to test to what degree the students have reached the aims and objectives of the course.

# 7. Final Grades

The final grades will be determined on the basis of quizzes, assignments, lab assignments, sessional examination and a final examination collectively. The grading criteria will be as per CIIT policies.