Course Description وصـف مقـرر دراسـي

متطلب متزامن Co-Req.	متطلب سابق Pre-Req	تمارين TU	عملي LB	نظري LT	الساعات CR	اســــــم المقــــــرر Course Title	رقم ورمز المقرر Course Code
317 كهر EE 317	– -	-	2	-	1	معمل الإلكترونيات - 2 **Electronics Laboratory - 2**	319 كهر EE 319

محتويـات المـقـرر :

تعريف بحزم برامج محاكاة الدوائر. تطبيقات المكبر التشغيلى. مذبذب فن. المرشحات الفعالة. دوائر شميد تريجر. دوائر متعددة الاستقرار. المكبر التفاضلى. محاكاة دوائر البوابات الرقميه

Course Contents:

PSPICE simulation of electronic circuits. Linear applications of op-amp. Wein-bridge oscillator. Active filters: LPF, and HPF. Schmitt trigger and unstable multi-vibrator. Differential amplifier using BJT. Design and implementation of digital circuits using VHDL. CMOS inverter characteristics. TTL inverter characteristics.

Course Objectives:

The main goal of this course of EE319, the students have to implement a various op-amp applications such as linear and nonlinear Op-amp applications, Differential amplifier (DA), Different Filters (LPF, HPF), Oscillators, Integrator and PSpice software to help the student simulate and do their home work, this course make the student able to implement a more difficult and advanced electronics circuit, and they will be ready for further courses such as electronics communication. This course is the main key for the communication option student to do and complete their final projects.

Evaluation Methods:

1. Midterm exams
2. Quizzes
3. Lab. Reports
4. Final exam

Text Book and References:

1- **Logic Design**, Morris Mano, McGraw-Hills, NY, 2004
2- **Digital Design-Theory and Practise**, John Wakerly, Prentice-Hall, NY, 2004

توقيع رئيس القسم:

توقيع عميد الكلية: