

EETE 3102	Electronics II	3 Credit Hours
Prerequisites:	EETE 2102	
Goal	To provide students with an understanding of the different electronic circuits used in Electrical Engineering.	
Objectives	Outcomes	
<p>The course should enable the student to:</p> <ol style="list-style-type: none"> 1. Understand the types and characteristics of MOSFET amplifiers. 2. Recognize different types of power amplifiers and understand their characteristics. 3. Know the structure of a differential amplifier and its characteristics. 4. Understand the structure and characteristics of operational amplifiers and its linear and nonlinear applications. 5. Know the feedback and its effects on the characteristics of amplifiers. 6. Understand the analog filters and tuned amplifiers. 7. Know the operation of a sinusoidal oscillator and types of this oscillator. 	<p>A student who satisfactorily completes the course should be able to:</p> <ol style="list-style-type: none"> 1. Fully understand the basic concepts and operation of electronic circuits and small signal amplifiers using MOSFET. 2. Discuss and analyze, the operation of class A, class B, class AB and class C power amplifiers. 3. To describe the operation & design of an operational amplifier, differential amplifier & Integrated circuit amplifiers. 4. Analyze several linear and nonlinear applications of operational amplifiers. 5. To be able to design, setup, and test tuned amplifiers, sinusoidal oscillators & waveform generators. 6. Describe the requirements for the technique used to achieve high frequency response and feedback stability of different amplifiers & be able to solve some mathematical problems. 	