INDIANA TECH

Course Syllabus Cover Page – Spring 2021

Course Number: EET 2150

Course Title: Electronics Circuits III

Course Description:

This course covers the theory and operation of analog electronic devices and circuits. Diodes, bipolar junction (BJT) transistors and MOSFETs are discussed. Students are introduced to the use of these devices as circuit elements. Basic application circuits such as; Power supplies, Clippers, Clampers, and Multipliers are studied. Troubleshooting of circuits with diodes and transistors will also be covered.

Prerequisites: EET 1200

Credit hours: 3

Learning Outcomes:

Upon the successful completion of this course, students will be able to:

1. Analyze and design half wave, full wave, and bridge full wave rectifier circuits.
2. Master the operation of diode limiters, clampers and voltage multipliers.
3. Analyze special purpose diodes such as Zener, Varactor and LED.
4. Perform analysis of BJT and MOSFETR transistors.
5. Trouble shoot circuits with diodes and transistors.

INDIANATECH

College of Professional Studies

EET 2150 Electronics III
Online Syllabus Course Content

Instructor Information

Please see Professor Profile at the Blackboard instructional site.

Course Schedule

Please see Course Schedule in the Course Syllabus area of the Blackboard instructional site.

Online Course Policies

All of the online courses taken by students are required to follow the policies posted online at http://online.indianatech.edu/tech-policies/policies/. Please review the posted policies carefully. If you are unable to abide by the policies listed, please contact the Warrior Information Network (WIN) at 888.832.4742 and request to withdraw from this course.

Textbook / Course Resources

There is no textbook for this course. In order to provide a variety of relevant and current learning resources for this course, a collection of lessons is utilized to assist students in achieving stated learning objectives. All the materials are accessible without cost to the student. Instructions for accessing these materials are provided in Blackboard in each course module in a folder entitled "Module XX - Learning Resources."

Grading Events & Grading Criteria

Unless otherwise specified, all assignments must be submitted via Blackboard.

You will have a variety of ways to demonstrate what you learn in this course. Below you will find the grading events and corresponding points available in EET 2100.

Grading Events

Week / Module	Description	Points Possible
1	Course Preparation Quiz	5
1	Module 1 HW – Diodes and Rectifiers	25
1	Module 1 Quiz - Diodes and Rectifiers	10
2	Module 2 Discussion – Fact and Application	10
2	Module 2 HW – Limiters and Clampers	25

Week / Module	Description	Points Possible
2	Module 2 Quiz – Limiters and Clampers	7
3	Module 3 Discussion – Fact and Application	10
3	Module 3 HW – Special Types	25
3	Module 3 Quiz – Zener Diodes/Varactor	11
4	Module 4 Discussion – Fact and Application	10
4	Module 4 HW – Transistors - BJT	25
4	Module 4 Quiz – Transistors - BJT	6
5	Project – Application and Differences of BJT, JFE and MOSFET	25
5	Discussion Board: Project	25
6	Module 6 HW - Troubleshooting	25
6	Module 6 Quiz - Troubleshooting	6
	Total Points Possible	**250**

Grading Scale

The following grade scale will be used to assign a grade at the end of the course.

Percentage Achieved	Grade
93% or above	A
90% or above	A-
87% or above	B+
83% or above	B
80% or above	B-
77% or above	C+
73% or above	C
70% or above	C-
60% or above	D
Below 70%	F

Late Assignments

Every effort should be made to submit work for this course on time, according to the posted course schedule. The abbreviated nature of this course makes it difficult to "make-up" a missed assignment. All assignments and required online activities are due according to the deadline listed in the course schedule. Granting deadline extension is the course instructor's autonomy.

Incompletes

If you are unable to complete the requirements for this course due to extenuating circumstances, an Incomplete grade (I) may be granted if you meet the general guidelines stated below.

General Guidelines for submitting a course incomplete request:

- More than 50% of the course session has elapsed.
- The student has encountered an unexpected situation that is beyond his or her control.
- The student is
  - in good academic standing -- up to date on all of the course assignments and has at least an overall passing grade,
  - able to complete all of the remaining coursework within a session (6 weeks for a undergraduate course and 6 weeks for a graduate course) that immediately follows the session the student is currently enrolled, and
  - able to provide support documentations to substantiate the need for extra time should a session is not enough to complete the course requirements.

If an Incomplete is granted, the instructor will set a deadline for all work to be completed. **The deadline cannot go past one (1) session**. All incomplete grades and deadlines are subject to approval by the designated university authority.

Course Related Communication

Online courses are conducted in an accelerated format. Timely communication is very important. When receiving emails from your classmates or instructor, please respond as soon as you can.

Students are REQUIRED to use their Indiana Tech email account for all course related communication. The most direct, and effective, way to email your course instructor, and classmates, is by using the Send Email function from the Blackboard course site. When you use the Send Email function, you automatically receive a carbon copy of the email you sent. In the event when you need to substantiate your claim that you did email your classmates or instructor, you can show that carbon copy to the person(s) who requested it.

Please note that Blackboard only permits you to send email, it does not provide you with the check email function. All of the emails your classmates and instructor sent to you will be delivered to your Indiana Tech email account. You are strongly encouraged to check your Indiana Tech email account regularly, preferably several times a week, to minimize the likelihood of miscommunication.

The University policy requires each online course instructor to respond to a student's email within 24 hours. Unless there is an extraneous situation that prevents the instructor from following this rule, you can expect to hear from the instructor within 24 hours. If you don't receive a reply within 24 hours, please do not hesitate to follow up with another email or forward the carbon copy of the email you sent to OnlineSupport@IndianaTech.edu with a note "Please help. It's been 24 hours and I have not heard from my instructor" and the University support staff will act on your behalf to contact your course instructor.