INDIANA TECH

Course Syllabus Cover Page – Spring 2021

Course Number: EET 1300

Course Title: Digital Circuits

Course Description:

Fundamentals of digital circuits and logic will be discussed. Topics include binary numbers, Boolean algebra, digital logic gates, and Karnaugh maps. Differences in power requirements for digital circuits will be discussed. Fundamentals of digital simulation using a pSpice based simulator will be discussed.

Prerequisites: MA 1030 or concurrent registration.

Credit hours: 3

Learning Outcomes:

Upon completion of the course students will be able to:

1. Perform conversion between different number systems
2. Use Boolean algebra to simplify Boolean expressions
3. Analyze circuits comprising of the basic logic gates (AND, OR, NAND, NOR. NOT, XOR,XNOR.
4. Optimize logic using Kamaugh maps,
5. Explain the usage of latches, flip-flops, and counters
6. Use a pSpice simulator to analyze digital circuits

INDIANA TECH
College of Engineering
EET 1300 Digital Circuits
Online Syllabus Course Content

Instructor Information
Please see Professor Profile at the Blackboard instructional site.

Course Schedule
Please see Course Schedule in the Syllabus & Schedule 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 one textbook to be used in this course. The necessary chapters in pdf format are posted for each module.

Digital Design with an introduction to the Verilog HD, 5th Edition, M. Morris Mano and Michael Ciletti, Pearson, 2013

Grading Events & Grading Criteria
Unless otherwise specified, all assignments, quizzes and project must be submitted via Blackboard.

Grading Events

Assessment	Points Possible
Course Preparation Quiz	2.5
HW-1	8
HW-2	8
HW-3	8
HW-4	8
HW-5	8
Quiz-1	12
Quiz-2	12
Quiz-3	12
Quiz-4	12
Power Point Presentation	12
Total	**102.5 points**

Grading Scale

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

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

Late Assignments

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 (5 weeks for an 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 not be 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 within 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 send 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.