

# University of Texas at El Paso

## EE 2369: Digital Systems Design I → UPDATED FOR ONLINE MODE

Spring 2020

### Updated for Online Mode:

The following text in green was added to the syllabus. The modifications to our previous syllabus (starting at bottom of Page#3) are denoted by **yellow highlighted text**. Please also refer to the **companion document** titled **“Adjustments to EE2369 for Online Mode”** (A.K.A **‘To-Do’ list**)

**Due to the extraordinary crisis situation** we are all going through; we will have to complete the semester in 100% online mode. We will need mutual collaboration, flexibility and understanding of the great challenges this situation has caused on both students/instructors.

### Please keep in mind the following:

- **Some assignments are no longer possible**
- **Some expectations are no longer reasonable**
- **The implementation of some policies is no longer feasible, hence they will no longer be available**

### In order to continue your academic progress related to this class we will have:

- **Accessible asynchronous content** to accommodate diverse access, time zones, and contexts. Please be proactive and continue your academic activities by diligently keeping track of your own progress and by **working at your own time** (to allow flexibility for everyone’s schedule). Make sure to **accesses all the additional resources posted on Blackboard (recorded-mini-lectures, ‘how to..’ instructions, reference materials)** and **meet the posted deadlines (explicit calendar** has been made available to help you keep track of what you need to do).
- Incorporate **online tools** for content delivery, assessment submission (hence **you will need a device that provides you access to these tools** in order to complete your preparation and to participate in all assessment activities. Complete the **“To-Do List”** contained in the document titled **“Adjustments to EE2369 for Online Mode”**
- **Synchronous discussion sessions** will only occur when information/discussion benefits from real-time collaboration {Example: first class session for online mode to go over the changes and how to use the tools, exam review sessions, etc) }. During this live-session you will have the opportunity to ask questions {on chat or audio/video} and share screen in the Blackboard Collaborate Ultra environment.
- If you have questions or anything that you want to address with the instructor, please attend **Virtual Office hours** for live one-on-one communication opportunities. You can also attend office hours for our class Tutors in the same Blackboard Collaborate environment

**Prepare for Online mode:** **Read the companion document called “Adjustments to EE2369 for Online Mode” and complete the included “To-do” list in order to be ready to participate in the online version of our class.**

**Temporary Satisfactory/Unsatisfactory (S/U) Policy for Spring 2020 Courses:** Our course is eligible and **we have opted-in** on this grading policy option to provide individual students to make the choice of grading mode. A passing grade will appear on student transcripts as an “S” (satisfactory), and a failing grade will appear as a “U” (unsatisfactory). Neither an “S” nor a “U” will calculate into the

student GPA. A grade of “S” will meet prerequisite requirements and count toward major/minor requirements. Therefore, **each individual student will have two grading modalities to choose from:**

- Any student can decide to **remain in the traditional letter-grading mode** (no need for further action) **or**
- Any student can decide to **take the S/U option**. Please note **the criteria in this course for getting an S will be a grade of “C” or better**. The student **must declare their wish to take this course as S/U** by submitting their declaration form **by the deadline of May 7<sup>th</sup>2020**. Also, please note that **once you make your declaration it is irreversible**.

Scale for <b>Letter Grade</b> mode:	Satisfactory/Unsatisfactory (S/U) Grading mode:
90% -- 100% → A	A student who declared a change in grading mode to S/U modality will get:
80% -- 89% → B	<b>S</b> -- if they meet the criteria for receive an "A" or "B" or a "C" in the class
70% -- 79% → C	<b>U</b> -- if they had the crieteria to receive a "D" or an "F" in the class
60% -- 69% → D	
0% -- 59% → F	

Before making any decision, please discuss your options with your **advisor** to determine which grading mode would be appropriate for you. Before electing the S/U grading option, students should inquire if the S/U grade will, (1) negatively influence your transcript when applying to graduate or professional schools, or (2) be appropriate if you need to increase your GPA. To learn more about the implications of this S/U policy, click [here](#) for frequently asked questions regarding the S/U option. If you should determine that the S/U option is appropriate for you, please fill out [this form](#) and return it to [records@utep.edu](mailto:records@utep.edu) (or access the form here

[https://forms.office.com/Pages/ResponsePage.aspx?id=0iF8hRYapEQz9V\\_P6udLyq8r\\_qqiJIJo\\_3hONGxzhpUN1Y0MEZRUEFNS1M3UE5EWldHNkYxUUphOC4u](https://forms.office.com/Pages/ResponsePage.aspx?id=0iF8hRYapEQz9V_P6udLyq8r_qqiJIJo_3hONGxzhpUN1Y0MEZRUEFNS1M3UE5EWldHNkYxUUphOC4u) ) before the deadline of May 7<sup>th</sup>. An annotation will go into every student’s official transcript indicating that the S/U grading mode was utilized due to the national health crisis.

### **Temporary Course Drop Policy for Spring 2020 Courses**

The deadline to drop a course has been extended to May 7, 2020. Courses dropped in the Spring 2020 semester will receive a grade of “W” (withdrawal) and will not count toward students’ six-course drop limit. Students who elect to drop a Spring 2020 course do not need written approval from advisors or instructors. To drop a course, students should simply email [records@utep.edu](mailto:records@utep.edu) from their Miners email account and include: (1) their name, (2) student ID, (3) course name (e.g. EE 2169), and (4) the course CRN (e.g. 27036) (<https://www.utep.edu/student-affairs/registrar/registration/index.html>) The temporary change applies to students who will remain enrolled in at least one class at the institution for the Spring 2020 semester. Dropping *all* courses is considered a complete withdrawal and follows a [separate policy](#).

**Use the following decision tree to help you in the decision process:**

[https://www.utep.edu/provost/Files/docs/curriculum/S-U\\_decision-tree.pdf](https://www.utep.edu/provost/Files/docs/curriculum/S-U_decision-tree.pdf)

# University of Texas at El Paso

## EE 2369: Digital Systems Design I → UPDATED FOR ONLINE MODE

Spring 2020

CRN: 27038 & 24094

Environment: Blackboard Shell

\*Regular class meeting times will be used only for extraordinary Live-sessions {information sessions}

**Instructor** Professor Miroslava Barúa

**Phone** ~~(915) 747-5720~~

**Office** Virtual Office @ Blackboard shell

**E-mail** miroslav@miners.utep.edu

**Office Hours** Mon 9:00AM–10:00AM, Wed 3:00PM–4:00PM or  
by appointment.

### Required Course Materials

- Title:** “Digital Design (with an Introduction to the Verilog HDL, VHDL, and System Verilog”  
**Authors:** M.Morris Mano and Michael D. Ciletti.  
**Edition:** 6<sup>th</sup> Edition  
**Publisher:** Pearson  
**ISBN-10:** 9780134549897  
**ISBN-13:** 978-0134549897
- Use of @miners e-mail account, **Blackboard** and **iClicker** account for class resources, announcements and submitting certain assignments.
- Use of ZyBooks {electronic Book free of charge!} for homework assignments after March 30<sup>th</sup>

**Course Description:** In Digital Systems Design I you will learn about design and synthesis of digital systems using both combinational and sequential circuits

**Prerequisite:** EE 1305 or CS 1401 with a grade of “C” or better.

**Co-requisite:** **EE 2169 (Lab for EE 2369)**. Software simulation projects are performed in this lab associated with our class. Student is responsible for completing the labs, and meeting with the Teaching Assistant at the formally scheduled time assigned to the section in which the student registered. Please note that the lab is 1 credit hour, and the grade for that lab is calculated **separately** from the grade in this class.

**Students successfully completing EE 2369 will be able to:**

- Apply concepts of number systems to perform binary arithmetic and conversions
- Analyze & synthesize digital circuits, both combinational & sequential
- Design combinational circuits, such as binary adders, code converters, etc., by using logic gates
- Design sequential circuits, such as counters, registers, etc., by using flip-flops and other hardware
- Design, simulate or implement, and test digital circuits both hands-on (using physical devices) and with CAD tools
- Solve engineering problems with the Algorithmic State Machines (ASM) technique
- Design, simulate, and test digital circuitry using Verilog Hardware Description Language
- Design, implement, and test digital circuitry by prototyping designs using the selected development system

Please refer to file "Adjustments to EE2369 for Online Mode" for all the changes necessary to complete the Course in online mode

## Grading & Course Assignments

There will be **no** curving of grades in this course.

**Grading** will be based on the standard scale:

- 90% >.....**A**
- 80% -89%.....**B**
- 70% -79%.....**C**
- 60% -69%.....**D**
- Below 59%.....**F**

Course Grade Distribution	
Exam #1- {completed}	22%
Exam #2- Online	22%
Exam #3- Online	22%
Quizzes & Homework	25%
Instructor Assessment	9%
<b>TOTAL</b>	<b>100%</b>

### Scale for Letter Grade mode:

- 90% -- 100% → A
- 80% -- 89% → B
- 70% -- 79% → C
- 60% -- 69% → D
- 0% -- 59% → F

### Satisfactory/Unsatisfactory (S/U) Grading mode:

A student who declared a change in grading mode to S/U modality will get:

**S** -- if they meet the criteria for receive an "A" or "B" or a "C" in the class

**U** -- if they had the crieteria to receive a "D" or an "F" in the class

**Exams:** There will be only three partial exams (#1 has already been completed, #2 and #3, all equally weighted) to assess your knowledge of the digital systems design techniques studied during each period of the course. **The exam dates are provided on the associated handout entitled "Important Dates".**

**This course requires the use of LockDown Browser for online exams.** You will be asked to provide your official UTEP credentials to be allowed to take the exam. You should use your own notes from watching the pre-recorded-lecture videos, homework problems, examples, quizzes and handouts as your study guide for the exams. **The use of calculators or other electronic devices is strictly prohibited during all exams and quizzes.**

**No make-up exams will be given.** If there is an extenuating circumstance that can cause a student to **miss one** examination (due to medical or work related issues) you **must** communicate with the professor **immediately**.

**Quizzes:** A portion of your grade will come from quizzes that will assess your completion and understanding of all homework assignments as well as your basic understanding of the class topics. You are **required** to read the textbook, please refer to the "Course Schedule" for the topic sequence. Quizzes are a portion of your class grade so make sure to be well prepared for them on a timely manner. The intention of the quizzes is to encourage you to stay on track with the class material as you prepare for the exams and to provide you with feedback. **No make-up quiz will be given, but your lowest quiz score will be dropped and all others will count towards your grade.**

**Homework:** A portion of your content mastery depends on completion of homework assignments, so make sure you understand and can solve all the problems by yourself. Remember to seek immediate assistance from the different resources (virtual offices of instructor, tutor, TA) if you need help and/or ask questions at the discussion board. You are responsible for doing the homework, even though it may or may not be collected. Homework assignments will include individual or group problem sets (**Paper homework assignments**) and reading assignments from ZyBook. All must be completed by the deadline. When collected, you must submit your **scanned homework by the due date**. Late homework will only be accepted in the case of illness or an emergency; you are responsible for notifying me as soon as possible (**before class**) of the situation (illness or emergency) necessitating late submission of homework. Good homework presentation, including neatness and legibility, are **expected and required**. To receive full credit, all submitted work must have Student's Name, Assignment name, EE2369, Section MW 7:30AM and Due date. Problems should be presented in the same sequence as listed on the assignment instructions.

**Instructor Assessment:** your active class participation will be assessed by completing assessment activities and by using all required course materials

### Course Schedule and Important Dates:

This information will be available on Blackboard as separate documents highlighting topic sequence, key assignments, important dates and activities. Such documents are subject to changes at the discretion of the instructor to adapt to the needs of the class.

### Learning Environment

**Prepare in advance:** In order to be successful, each student must be proactive in using all the online resources and keeping up with announcements made on Blackboard. This means that you must refer to all the resources (physical textbook, electronic book and lecture videos) about the current and upcoming topics, understand your homework, and complete any other assignment BEFORE the deadline.

**Classroom NetEtiquette/ Student Conduct:** You must be courteous, respectful and professional in the way you address others; either in writing (email, chat, discussion boards) or during one-on-one sessions at virtual office with instructor/TAs/Tutors

**E-mail Communication:** For all your class related e-mails use the prefix "**EE2369 CRN #**" followed by the rest of the message's subject description (Example: "**EE2369 CRN 27038: Question about homework**"). Send all messages from your Miners account and **include your name**.

## Course & University Policies

**Attendance:** Attendance will be given by your active participation in the class assignments/assessment items. If you have amount of missed assignments you may be dropped from the course. The grade that you receive will be a W until the **course drop deadline**.

**Electronic Devices:** You must have access to an internet connected device to access course resources, participate in assessment items and to take Exams and Quizzes by using the appropriate tools within Blackboard

### Center for Accommodations and Support Services (CASS):

Students requiring unique accommodations must contact the CASS office and provide their instructor with the proper documentation at the beginning of the semester. Please make sure to **meet with the instructor at the beginning of the semester** to discuss necessary arrangements. The CASS office may be contacted at 747-5148, [cass@utep.edu](mailto:cass@utep.edu) or go to Room 106 Union East Building.

### Scholastic Integrity/Academic Honesty:

**Any form of academic dishonesty will not be tolerated.** "Plagiarism" is the unattributed use of someone else's work -- a classmate's, a website's, even a teacher's from another course. In accordance with University regulations, scholastic dishonesty on a given assignment **will** be subject to disciplinary action and **will** be referred to the Office of Student Conduct and Conflict Resolution (OSCCR). Dishonesty/cheating/plagiarizing may result in a zero on the assignment, an "F" in the course, or even suspension from the university. If you need assistance with your assignments, please consult authorized sources of help. For more information on Scholastic Dishonesty and/or Plagiarism, consult the [Handbook of Operating Procedures: Student Affairs](#), which is available in the Office of Student Life.

### Tips for Success in this class:

1. Watch the recorded lectures and take good notes
2. Read, study and use all the course materials.
3. **Visit the class Blackboard and read UTEP e-mail every day to avoid missing deadlines or announcements**
4. Visit instructor during office hours if you need assistance, or use e-mail to set up an appointment
5. Finish your assignments early and use all available resources (including Tutoring services). Make sure to understand how to solve these assignments as you may have a quiz about this content.
6. Be proactive and meet all the deadlines **(make sure you also comply with the equipment requirements necessary for online delivery/participation)**
7. Start your success by not falling behind!
8. Remember that the grade you get is the grade you earn. It is up to you to monitor your own performance and adjust your efforts on a timely manner if you find that you are falling behind on your grades.