

## COSC 3321: Digital System Design 2018 Spring

### **Course Information**

Instructor:	Mingkui Wei, Ph.D. Assistant Professor, Dept. Computer Science, SHSU.
Office Location:	212A, Academic Building I
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Class Time:	9:00 – 9:50, Mon, Wed & Fri
Office Hour:	9:50 – 11:00, Mon, Wed & Fri, or by appointment.

### **Prerequisites**

- Basic knowledge of programming languages, and computer operation.

### **Description**

This course focuses on basic principles and practices of the design of digital systems. It introduces theories such as the number system, Karnaugh map, finite state machine, and practices such as the design of combinational and sequential logic gates.

### **IDEA Objectives**

Based on the Individual Development & Educational Assessment (IDEA), at the end of this course the ideal student should be able to present the following essential and important objectives:

1. Gaining factual knowledge (terminology, classifications, methods, trends) in digital forensics and information assurance.
2. Learning fundamental principles, generalizations, or theories in digital forensics and information assurance

### **Textbooks**

- “Digital Design and Computer Architecture”, 2<sup>nd</sup> Edition, by David Harris and Sarah Harris. ISBN: 9780123944245.

### **Course Structure**

- Homework (approximately 6 - 8): you will be asked to solve problems based on course materials.
- Projects (approximately 4 - 5): you will be asked to design digital systems to accomplish certain functions.
- There will be two midterms and one final exam.
- Unless otherwise advised, all assignment must be typed and submitted using the BlackBoard. All text file must be submitted in PDF format, other file formats will not be graded.

**Grading**

Component	Value	Comment
Homework	20%	Grade will be evenly divided to all homework assignments.
Projects	25%	Grade will be evenly divided to all lab assignments.
Midterm exam x2	15% each	All exams are cumulative: each exam covers material given from the 1 <sup>st</sup> day till the time of exam. Exam time will be informed at least 1 week in prior.
Final exam	20%	
On-time attendance	5%	On-time attendance is required. Student must arrive within 10 minutes from the start of class.

**Grading Scale**A:  $\geq 90$ ;B:  $\geq 80$  &  $< 90$ ;C:  $\geq 70$  &  $< 80$ D:  $\geq 60$  &  $< 70$ ;F:  $< 60$ .**Late Assignments**

For homework and labs, score will be deducted by 20% for each 24 hours past the deadline, and won't be accepted if submitted later than 120 hours.

**Attendance/Absence Policy**

In accordance with University Policy, regular attendance is required and your attendance will be seriously monitored. Students are expected to arrive to the classroom on time, otherwise no full attendance credit for the day will be given. You are responsible for all material covered in every class, regardless of whether you attended or not. It is your responsibility to obtain notes, assignments, etc., from fellow class members if you miss a class.

**Academic Integrity**

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The university and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Students should be aware that the instructor reviews all programming assignments and exercises for evidence of collaborative work. While it is sometimes appropriate and encouraged for students to discuss concepts and ideas, it is never permissible (unless otherwise stated) to collaboratively work on coded assignments, to share or swap completed or partially completed programming assignments. In addition it is not permitted for students to use code examples provided by the instructor and/or found online, without appropriate documentation/citation of the use of that code.

**Class Conduct**

Student will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and/or pagers must be turned off or muted during the class time. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking among each other at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class or being reported to the Dean of Student for disciplinary action in accordance with university policy.

**Visitors in Classroom**

Occasion visiting of class by responsible persons is allowed with prior arrangement with the instructor, as long as it does not interfere with the registered members of the class or the educational process.

**Americans with Disabilities Act**

Students with disabilities covered by the Americans with Disabilities Act should go to the Counseling Center and Service for Students with Disabilities (SSD) in a timely manner to obtain the documentation required. Students are responsible for initiating the process of documenting the need for an accommodation under the ADA act.

Any student with a disability that affects his/her academic performance should contact the Office of Services for Students with Disabilities in the SHSU Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786) to request accommodations.

**Religious Holidays**

An institution for higher education shall excuse a student from attending class or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.