COSC2329: Computer Organization and Machine Language
2017 Fall

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:	12:30 – 1:50, Tuesday & Thursday
Office Hour:	9:30 – 12:00, Tuesday & Thursday, or by appointment.

Prerequisites

- Basic knowledge of computer and computer systems.
- Basic knowledge programming languages (COSC 1436).

Description

An introduction to instruction set architectures, emphasizing central processor organization and operations. Specific topics include data representations, register architectures, addressing modes, the fetch/ execute cycle; interrupts, subprogram calls, I/O services, digital logic gates and basic Boolean algebra, and sequential and combinational circuits.

Textbooks

- "*Computer Organization & Design, The Hardware/Software Interface, Fifth Edition: The Hardware/Software Interface*, Patterson & Hennessy, Morgan Kaufmann publisher, 2013.

Tentative Schedule

Topic	Primary Reference	Duration (weeks)
Introduction	Chapter 1	1.0
Machine language	Chapter 2	2.5
Arithmetic	Chapter 3	3.0
Processor organization and design	Chapter 4	3.0
Memory and I/O	Chapter 5	3.0
Parallel Processing	Chapter 6	2.5

Grading

Component	Value	Comment
Homework	40%	Roughly 10, and you can skip one.
Midterm exam x2	15% each.	All exams are cumulative.
Final exam	25%	Exam time will be informed at least 1 week in prior.
On-time attendance	5%	On-time attendance is required.

Grading Scale

A: >= 90;

B: >= 80 & < 90;

C: >= 70 & < 80

D: >= 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 after 72 hours.

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

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 competed 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 by 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.