students will working groups to deliver presentations on pre assigned topics. A tool 'MARS' will be used to study assembly programing concept.

Course Description

Instruction sets, assembly language and assemblers, linkers and loaders, data representation and manipulation, interrupts, pointers, function calls, argument passing and basic gate level digital logic design

Computer Organization, Number representation, Programming a Computer, Compilation, Assemblers, Linker, Loader, MIPS assembly language programming, Run Time Memory

Upon successful completion of this course, students should be able to

To be familiar with the architectural components of a computer system: CPU (registers, ALU), memory, buses

To be able to convert between decimal, binary, and hexadecimal notations

To work with two's complement integers, floating point numbers, and character encodings

To be able to write assembly programs that use load/store, arithmetic, logic, branches, call/return and push/pop instructions.

To understand the gate level operations of basic ALU

Required Texts/Readings

COMPUTER ORGANIZATION and DESIGN | Edition 5
Author: DAVID A. PATTERSON, ISBN:9780124077263
Publication Date: 10/10/2013 Publisher: ELSEVIER

Other Readings

Logic & Computer Design Fundamentals 5th Edition ISBN 9780133760637
Author(s): M Morris R. Mano, Charles R. Kime, Tom Martin Publisher: PEARSON

Classroom Protocol
Lucas College and Graduate School of Business: Program Goals and Classroom policy
http://www.sjsu.edu/cob/Students/policies/index.html

Eating
Eating and drinking (except water) arʹ urdurdurdm o un

Computer Use:

Students use computers only for class-related activities. These include activities such as taking notes on the lecture underway, following the lecture on Web-based PowerPoint slides that the instructor has posted, and finding Web sites to which the instructor directs students at the time of the lecture. Students who use their computers for other activities or who abuse the equipment in any way, at a minimum, will be asked to leave the class and will lose participation points for the day, and, at a maximum, will be referred to the Judicial Affairs Officer of the University for disrupting the course. (Such referral can lead to suspension from the University.) Students are urged to report to their instructors computer use that they regard as inappropriate (i.e., used for activities that are not class related). No recording devices may be used in the classroom.

Academic integrity statement (from Office of Judicial Affairs):

Your commitment to learning as evidenced by your enrollment at San José State University and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Judicial Affairs. The policy on academic integrity is at http://www2.sjsu.edu/senate/S04-12.pdf

Campus policy in compliance with the Americans with Disabilities Act:

If you need course adaptations or accommodations because of a disability, or if you need special arrangements for this online class, please email me as soon as possible and make an appointment to see me. Presidential Directive 97-03 requires that students with disabilities register with AEC to establish a record of their disability.

Proctoring Software and Exams

Exams will be proctored in this course through Respondus Monitor and LockDown Browser. Please note it is the instructor's discretion to determine the method of proctoring. If cheating is suspected the proctored videos may be used for further inspection and may become part of the student's disciplinary record. Note that the proctoring software does not determine whether academic misconduct occurred, but does determine whether something irregular occurred that may require further investigation. Students are encouraged to contact the instructor if unexpected interruptions (from a parent or roommate, for example) occur during an exam.

Recording Zoom Classes

If necessary, portions of this course (i.e., lectures, discussions, student presentations) may be recorded for instructional or educational purposes. The recordings will only be shared with students enrolled in the class through Canvas.

Students are not allowed to record without instructor permission.

Students are prohibited from recording class activities (including class lectures, office hours, advising sessions, etc.), distributing class recordings, or posting class recordings. Materials created by the instructor for the course (syllabi, lectures and lecture notes, presentations, etc.) are copyrighted by the instructor. This university policy (S12-7) is in place to protect the privacy of students in the course, as well as to maintain academic integrity through reducing the instances of cheating. Students who record, distribute, or

Download Instructions

Download and install LockDown Browser from this link:

https://download.respondus.com/lockdown/download.php?id=9679 37270

Once Installed

    Start LockDown Browser
    Log into to Canvas
    Navigate to the quiz

Extra Credits:

Course Schedule[1]

Date	Lecture	Notes
01/23		
01/28	Introduction to Computer	Use cases in real world, system programming
01/30	Computer Organization	Architecture and Working; Code Instruction Flow at hardware level
02/04	Number Representations in Computers	Data Types, Team Formation for Presentations
02/06	Programming a computer	Compilation Flow Assembler; linker and loader; Code flow in depth
02/11	Assembler; Linker; Loader	
02/1		