

Course Description:

Study of:

- Computer architectures
- Bus structures
- Interrupts
- Memory interface and controllers
- Bus arbitration
- DMA controllers
- I/O interface
- Bridges and microcontrollers
- Electromagnetic compatibility and regulations
- Cabling and shielding, grounding, digital circuit noise and layout

Course Location and Times:

- Location: SQU 316
- Lectures: Tue/Thu 3:00pm – 4:15pm
- Office Hours: Tue/Thu 10:30am – 11:30am (RVR 3024)

Course Materials:

- Tanenbaum (2013) *Structured Computer Organization* (6th). Pearson Education; ISBN: 9780132916523
- Shanley (1995) *ISA System Architecture* (3rd). Addison Wesley; ISBN: 9780201409963
- Mindshare (1999) *PCI System Architecture* (4th). Pearson Education; ISBN: 9780201309744

Grading:

- Problem Sets (40%)
- 2 Midterms (40%) (20% each)
- Final Exam (20%)

Home Works Submission & Late Policy :

- HWs should be emailed prior to due dates specified in Course Calendar.
- Late Policy: 20% penalty for each day delay
- All home works and reports should be typed.

Home Works Naming Policy :

- All homework files (and email subject lines) must be named in the following format:

CPE_186_FirstName_LastName_HWx

Example of homework file: CPE_186_Mehran_OstadRahimi_HW2.pdf

Example of email subject line: CPE_186_Mehran_OstadRahimi_HW2

Course Etiquette :

You may (and encouraged to) ask questions during lectures!

Adherence to the Sac State Policies & Rules is mandatory.

Collaboration Policy

- Home works: you may collaborate with anyone
- But you should turn in the results individually and independently
- Write the names of all collaborators on submission