

require using software available on the machines in the computing lab. See the Laboratory Overview handed out in class next week for more information on the labs and check-off and submission procedures. Please note that *you must complete all 4 labs* to pass this course.

Lab assignments generally require several hours of design and debug time. In order to avoid the last-minute crunch in the lab, *start labs early*. Waiting until the night before to start your lab and then claiming there were no free stations available to debug and demo your assignment is not a valid excuse for handing in an assignment late without penalty.

Exams: There will be a midterm and regularly scheduled final exam for this class. The midterm will be given in class on Friday, **March 16**. The final will be given on Wednesday, **May 18** from 2pm–5pm — the last finals slot of the semester :-).

Homework: There will be approximately 4–5 homework assignments given throughout the semester. Homeworks should be handed in at the beginning of class on the due date. Late homeworks will receive no credit. While only 10% of your grade, homeworks cover most of the material for the exams. Doing homework is an excellent way to prepare for exams. Collaborating on homework is fine, however, you should understand what you are handing in. If you cannot turn in an assignment on time because of prolonged illness or other legitimate personal or family reason, please talk to me to work out an extension.

COURSE OUTLINE

- Introduction and Metrics for Computing
- Instruction Set Design
- Processor Bus Design
- Basic Processor Pipelining
- Computer Arithmetic
- Memory Hierarchy Design
- Advanced Pipelining and Instruction Level Parallelism
- Dynamic Branch Prediction
- Multiprocessor Machines
- VLIW Machines