CS 170 Computer Organization and Architecture I
Fall 2020

Instructor

Dr. Yaohang Li
Office: E&CS 3212
Office Phone: 757-683-7721
E-Mail: yaohang@cs.odu.edu

Course Web site: http://www.cs.odu.edu/~yaohang/cs170

Catalog Description:
Fundamentals of architecture and operation of modern computers. Basic computer logic: logic
equations; gates; combinatorial logic. Basic computer arithmetic; binary numbers; floating point
representation. System hierarchy, overview of a computer; integrated circuit technology.
Performance; metrics; choosing benchmarks; Amdahl's law. Instruction Sets and Operations:
assembly language; machine language; examples of other instruction sets.

Credits: 3(3-0)

Prerequisites: MATH 102M and a grade of C or better in CS 150.

Textbook:

Course Delivery Method:
This course will be delivered via Zoom web meeting. Course materials including powerpoint
slides, additional materials, and homework assignments will be available on the course website.
Class meeting will be held synchronously from 3PM-4:15PM on MW via Zoom. Zoom link will
be available at the course website and blackboard. Attendance of the Zoom session during class
meeting times is highly encouraged. Recordings of the Zoom session will be available at the
course website.

Office Hours:
My office hours will be at 2PM-3PM on Tuesdays and Thursdays, or by appointment. All office
hours will be held via Zoom. Zoom link will be available at the course website and blackboard.

Grade Evaluation:
All work will be graded on a numerical scale. Missed homework or exams will receive a grade
of zero. The final grade will be the weighted sum of all work using the following weights:
30% Midterms (2 midterms)
40% Homework Assignments
30% Final
Total 100%.
Late assignments: Homework should be submitted by the beginning of class on the due date, unless accompanied by a valid excuse. Late homework is penalized by 5% per day. Homework more than 48 hours late will not be accepted.

Make-ups for graded activities are possible only with a valid written medical or university excuse. It is the student's responsibility to give the instructor the written excuse and to arrange for any makeup work to be done. A makeup exam may be different (and possibly more difficult) than the regularly scheduled exam.

I will follow the rules of the Undergraduate Bulletin for grade assignment.

Final letter grades will be based on the following scale:

$$
A \geq 90, \quad 90 > A- \geq 87, \quad 87 > B+ \geq 84, \quad 84 > B \geq 80, \quad 80 > B- \geq 77, \quad 77 > C+ \geq 74, \quad 74 > C \geq 70, \quad 70 > C- \geq 67, \quad 67 > D+ \geq 64, \quad 64 > D \geq 60, \quad F < 60.
$$

Attendance:
Attendance is highly recommended. Some material presented in the lecture is not covered by the text. Students with special needs (e.g. hearing or vision difficulties) should inform the instructor at the beginning of the semester.

Honor Code
Please refer to the statement on academic integrity given below.

By attending Old Dominion University you have accepted the responsibility to abide by the honor code. If you are uncertain about how the honor code applies to any course activity, you should request clarification from the instructor. The honor code is as follows:

“I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member if the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to Honor Council hearings if summoned.”

In particular, submitting anything that is not your own work without proper attribution (giving credit to the original author) is plagiarism and is considered to be an honor code violation. It is not acceptable to copy source code or written work from any other source (including other students), unless explicitly allowed in the assignment statement. In cases where using resources such as the Internet is allowed, proper attribution must be given.

Any evidence of an honor code violation (cheating) will result in a 0 grade for the assignment/exam, and the incident will be submitted to the Department of Computer Science for further review. Evidence of cheating may include a student being unable to satisfactorily answer questions asked by the instructor about a submitted solution. Cheating includes not only receiving unauthorized assistance, but also giving unauthorized assistance.

Students may still provide legitimate assistance to one another. You are encouraged to form study groups to discuss course topics. Students should avoid discussions of solutions to ongoing assignments and should not, under any circumstances, show or share code solutions for an ongoing assignment.
Please see the ODU Honor Council’s webpage for other concrete examples of what constitutes cheating, plagiarism, and unauthorized collaboration. All students are responsible for knowing the rules. If you are unclear about whether a certain activity is allowed or not, please contact the instructor.