# Lecture 1 Learning outcomes

Upon successful completion of this module, you will be able to:

* Identify categories/classes of computers;
* Describe the major components of a computer;
* Define the hardware/software interface;
* Define and measure performance (CPI, MIPS, and execution time);
* Evaluate processor performance via Benchmark suites.

# Lecture 1 Activities

As stated in the Class Schedule, during the summer intensive session for this 4-unit course you are expected to take 3 50-minute sessions daily for four days a week. Lecture 1 represents a 1-day 3-session workload. I designed the following three sessions with each session mimic a 50-minute lecture meeting. While you can allocate your own schedule and pace for studying, I strongly recommend that you devote at least the time suggested as the minimum requirement for completing the requirements and succeeding in this class.

**Session I:**

        ViewrecordedLecture (or slides) **Lecture 0: Course Introduction.**

Explore Canvas course site, read Syllabus and pay attention to Course Schedule.  
 Post self-introduction on Discussions (not for credit but encouraged and appreciated.)

Fill up Background Survey – P1 (10 pts for participation, answers not graded.)

Get zyBooks text ready.

(90%+ students from Summer 2020 said zyBook of great help for asynchronous learning.

Unfortunately, it costs some money.)

**Session II:**

          Viewrecorded Lecture (or slides)**Lecture1a: Introdution to Computer Architecture**

Study zyBook text Ch 1.1, 1.3, 1.4.

"Study zyBook" includes doing all participation activities embedded in the online text.   
 Teamwork (first attempt)

See P2 assignment for group creation/sign-up information – communicate with classmates via Canvas.

Study P2 questions (may answer questions later for discussion with team members.)

**Session III:**

          Viewrecorded**Lecture 1b: Computer Performance**

Study zyBook text Ch 1.6.

**Assignment Checklist:**

P1: Background Survey – due Th 6/3

P2: Lecture 1 discussions (team) -- due Sun 6/6

Z1: zyBook 1.1, 1.3, 1.4, 1.6 – due Th 6/3