98-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	計算機組織	Serial No. / ID	1734 / EEI3065
Dept.	電機工程學系	School System / Class	大學日間部3年1班
Lecturer	黃登淵	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	NO
Time / Place	(—)78 / H228 (<u>—</u>)8 / H228	Language	Chinese

Introduction

The purpose of this course will focus on the topics of computer architecture and functions. In this course, we will describe the intrinsic characteristics of modern computer in more detail. The computer organization emphasizes the following topics including instruction sets, data representation, I/O mechanism and memory addressing. However, the computer functions focus on the implementations such as data processing, data storage, data movement, and signal control. Furthermore, the related hardware of computer consisting of contral signals, peripheral interface, and memory contrl techniques will be described in detail.

Outline

Computer abstractions and technology

Sign and unsign numbers

Instruction set

MIPS Addressing for 32 bits immediate and address

Arithmetic for computers

Processor logic design

An overview for pipelining

Pipelined datapath and control

Memory hierarchy

Storage and I/O topics

Prerequisite

Introduction to computer