《计算机原理与汇编语言》课程中英文简介

Computer Organization and Assemble Language

课程代码：070673A **Course Code：**070673A

课程名称：计算机原理与汇编语言 **Course Name：**Computer Organization and

Assemble Language

学时：48 **Periods：**48

学分：3 **Credits：**3

考核方式：考试 **Assessment：**Examination

先修课程：数字逻辑与数字电路 **Preparatory Courses：**Digital logic and Digital Circuit

《计算机原理与汇编语言》课程为高等学校计算机科学与技术类的重要课程，是计算机专业本科生的专业课。它从普遍性和原理性的角度出发，讲述计算机硬件系统的组成、各部件的结构及工作原理。主要内容包括：运算器及运算方法，指令系统设计及IBM-PC汇编语言，存储系统的结构和工作原理及其在微机中的实现，CPU的结构、功能及指令的运行分析，微程序技术及应用，总线技术、输入输出技术及与此相关的汇编语言程序设计技术。通过对计算机各功能部件的逻辑组成、工作机制、程序设计的学习及实验，使学生建立较完备的计算机整机概念。通过汇编语言程序设计的学习，使学生掌握汇编语言程序设计的有关概念，并了解所用计算机硬件及使用软件扩大功能的实现方法，为后继课程及今后工作中解决实际问题打下一个良好的基础。

"Computer principle and assembly language" is an important course of computer science and technology in the college, and is a specialized course of computer major. It describes all components of computer system, its structure and working principle, universally and in principle. Its main content includes calculator and computing technology, instruction system design, IBM-PC assembly language, storage system structure and working principle, as well as its realization in microcomputer. Its main content also includes the structure of CPU, the running analysis of function and instruction, the technology and application of micro\_program, the bus technology, the I/O technology and its relevant assembly language coding technology. After learning the logic composing of all functional components of computer, the working mechanism of all functional components of computer, the program design, as well as its relevant experience, students can learn about the integrated concept of the whole computer. After learning this course, students can master the relevant concept of assembly language and its program design. And students can also learn about the realization method of ampliative function for hardware and soft ware in computer. And this can provide excellent foundation for successive course, in resolving practical problems in later working period.