National Sun Yat-Sen University

組合語言與微處理機

ASSEMBLY LANGUAGE AND MICROCOMPUTER
Fall 2014 Syllabus
Lect: 2:10-5:00 PM Thu Room: ECE 5012
Lab: 6:00-8:00 PM Mon Room: ECE 9013

Instructor:

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Office Hour：Tue 9:00~11:00, Thu 9:00~11:00 @ 電資 ECE5006

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Objective:

探討 ARM 組合語言語法及如何撰寫組合語言程式，同時進一步理解 ARM 微處理機的硬體架構。

Course Outline & Flow:

- ☐ Introduction to Processor and Embedded System Design
- ☐ The ARM Architecture
- ☐ ARM Assembly Language Programming & Instruction Set
- ☐ ARM Organization and Implementation
- ☐ Architectural Support for High-level Language
- ☐ Efficient C & Assembly Programming
- ☐ The Thumb Instruction Set
- ☐ Architectural Support for System Development
- ☐ CPU and Micro-processor labs

Grading Policy:

Written Exams	45 %
Lab	40 %
Homework+小考	15%

Textbook:

Steve Furber, 2000, ARM system-on-chip architecture, Addison-Wesley. (新月)

Reference:

* A N. Sloss, D Symes, C. Wright, 2004, ARM System Developer's Guide, Designing and Optimizing System Software, ELSEVIER. (新月圖書)

* Slides provided by the lecture.

Course webpage:

http://cu.cse.nsysu.edu.tw