

Lesson02



Agenda for today

- EMP coding standard
- Bit manipulation
- SysTick explained
- Debugging
- Discussion of Assignment01
- Lab02
 - SysTick
 - Bit manipulation

Preliminary course outline

- The plan is indicative, subject to change!

Date	Lecture	Subject(s)	Lab	Assignment due
Feb 2	1	Introduction; ARM Cortex-M4	Lab1: Setting up the development env.	
Feb 9	2	EMP coding standard; Bit manipulation	Lab2: Bit manipulation	
Feb 16	3	State machines; The compiler chain; EMP-Board	Lab3: State machines	PF1 – Assignment 1
Feb 23	4	The task model; The pre-processor	Lab4: A clock radio task model	PF1 – Assignment 2
Mar 2	5	Queues and semaphores; Debugging	Lab5: Debug with a serial connection	PF1 – Assignment 3
Mar 9	6	Run to complete scheduler	Lab6: RTCS, Run to compile scheduler	PF1 – Assignment 4
Mar 16	7	More debugging; C: printf()	Lab7: RTCS, Debugger	PF1 – Assignment 5
March 23	8	FreeRTOS	Lab8: FreeRTOS	PF1 – Assignment 6
March 30 April 6		Easter holiday		
Apr 13	9	More queues; Assembler in C	Lab9: FreeRTOS (continued)	PF1 – Assignment 7
Apr 20	10	Re-entrance		PF1 – Assignment 8
Apr 27	11	Work on the final assignment, consultations		
May 4	12	Poster session		PF2- Final Assignment

Reminder

- Sign up for 3 person groups:
 - <https://tinyurl.com/sduemp2026>
 - Put in your full name
- Get your TIVA boards (black box, red board) from the library if you have not already

