Syllabus – COEN 20
Introduction to Embedded Systems

Instructor: Thomas Bräunl
Email: tbraunl@scu.edu
Office Hours: Room 2.09, Tu/Th 9:00-10:00am or after lectures or by appointment
Phone: 554-4485 (Tu/We/Th)
T.A. Ginger Tseng, ginger.tseng@gmail.com,
Home Page: students.engr.scu.edu/~ctseng2/coen20/robotics.ee.uwa.edu.au
Section ID: 32098
Pre-Requisite: COEN 012 or MATH 61
Meeting Time: Lectures: Tu,Th 9:55 – 11:40am
Labs: Mo,We 2:15 – 5:00pm
Grading: Midterm (wk 4, Th Apr 26, “open book”) 30%
Final exam (Th June 14, 9:10am, “open book”) 70%
Pardue, C Programming for Microcontrollers, SmileyMicros 2005
Lecture Notes: Lecture notes and additional material will be made available on the web
Class Schedule: Week Topic Lab
1 Introduction -
2 Computer organization -
3 Number systems 1. Retro
4 Midterm 2. AVR
5 ATMega assembly, addr. modes 3. AVR
6 Sensors, actuators 4. AVR
7 Control 5. AVR
8 C and assembly link 6. AVR
9 Device drivers, software 7. AVR
10 Concurrency, scheduling -
Labs: Labs run in weeks 3-9.
Labs have to be submitted/demonstrated at the end of each lab session
Plagiarism: Standard rules for plagiarism apply