<table>
<thead>
<tr>
<th>Lecture</th>
<th>Reading</th>
<th>Out</th>
<th>Due</th>
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</thead>
</table>
| 0 | Tue. 3/29
Course Introduction
What’s A Microprocessor? | None | |
| 1 | Thu. 3/31/05
Event Driven Programming | Course Notes: *Event Driven Programming, State Machines* | Lab 0 |
| 2 | Tue. 4/05/05
Sensors | H&H Sections 9.10, 15.02-15.05, 15.10 (skim all of 15), Rorabaugh Ch. 2 | Pre-Lab 0 |
| 3 | Thu. 4/07/05
OpAmps (real ones) | H&H Sections 4.01-4.09 (4.10-4.26 skim) | Lab 1 (Friday) |
| 4 | Tue. 4/12/05
Mechanical CAD | TBD | Pre-Lab 1 |
| 5 | Thu. 4/14/05
Rapid Prototyping & Statics | Course Notes: *Fabulous Foamcore, Forces, Moments, Free Body Diagrams* | Lab 2 |
| 6 | Tue. 4/19/05
Digital Inputs, Outputs & Power Drivers | H&H Sections 9.02, 9.03, 9.04, 8.1-8.11, 8.16-8.19 | Pre-Lab 2 |
| 7 | Thu. 4/21/05
Solenoids and DC Motors | Rorbaugh: Ch. 3 & 6, Course Notes: *DC Motors and Generators, DC Motors* | Lab 2 |
| 8 | Tue. 4/26/05
Stepper Motors | Rorbaugh Ch. 5, Course Notes: *Technical Information on Stepping Motors* | Mid-Term |
| 9 | Thu. 4/28/05
A/D, D/A, Timers | H&H Sections 9.15-9.26 | Lab 3 (Fri.) |
| 10 | Tue. 5/03/05
Mechanical Components | Rorbaugh Ch 7 & 8, Course Notes: *1.2 Materials* | Pre-Lab 3 |
| 11 | Thu. 5/05/05
Project Planning and Organization | TBD | Project |
| 12 | Tue. 5/10/05
Design Review | No Reading, but be prepared to present your preliminary project design ideas | Preliminary Designs |
| 13 | Thu. 5/12/05
Modular Software Design in C | Handout "Chapter 4 Steps in Building a Routine", "Chapter 5 Characteristics of High-Quality Routines" |
| 14 | Tue. 5/17/05
Noise, Grounding & Isolation | H&H Sections 7.11, 7.23-7.25, 9.10(Opto-Couplers and Relays) Course Notes: *Summary of Noise Reduction Techniques* |
| 15 | Thu. 5/19/05
HLL, Interpreters, Compilers & Assembly Language | None |
CMPE 118 Course Syllabus

16 Tue. 5/24/05 Project Preview
Be prepared to demonstrate the ‘Project Preview’ level of functionality for your project.

17 Thur. 5/26/05
Communications, Serial & Otherwise
H&H p719 -736

18 Tue. 5/31/05 Project Review
Bring your finished project to class for an up-close review by the other members of class and teaching staff.

19 Thur. 6/02/05 Course Review
None

LAB DESCRIPTIONS

<table>
<thead>
<tr>
<th>Number</th>
<th>Material</th>
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<tbody>
<tr>
<td>Lab 0</td>
<td>Event Driven Programming: The Cockroach</td>
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<tr>
<td>Lab 1</td>
<td>Analog Signal Conditioning</td>
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<tr>
<td>Lab 2</td>
<td>Foamcore and Mechanical Prototyping</td>
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<tr>
<td>Lab 3</td>
<td>DC &amp; Stepper Motors</td>
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PRESENTATIONS

Project
Public presentation to be 7:00pm on the evening of 6/01/05, Guests are welcome.

EXAMINATIONS

Quizzes will be given at unannounced and irregular intervals during the quarter

Midterm Take Home, Out on 4/26/05, Due 4/29/05 Review Session Monday 4/25/05 Time: 9:00pm