EECE 280
http://www.ece.ubc.ca/~leos/e280

Course Overview

• Lectures
  – Every Monday
  – Practical Skills

• Labs
  – 5 total
  – Groups of 2
  – Every 2nd Thu/Fri (approx)
  – Demo to TA as you go
  – Collected on Tue/Wed
  – 2 bound lab books per team
  • One for even labs
  • One for odd labs
  • Staple loose sheets into book

• Projects
  – 2 projects
  – Teams of 6
    • Keep groups together
  – Same teams for cognitive sessions in other courses
  – Open ended design
  – Demonstration
  – Formal report
Course Grading

- **Labs**
  - 50% of final grade
    - 30% demo
    - 70% write-up
  - Both group members get same mark

- **Project**
  - 50% of final grade
    - 70% function
    - 30% report

  - Team members determine mark distribution
    - Total = # of Students * 100
    - Usually 600 total points
    - Mark = Team mark * points

  - Disagreement resolved
    - oral examination
    - lab books.

- **Must pass Lab & Project to pass course.**
  - Failing grade (<50%) in either part = final mark for course.
Example: Team 9 of Clubs

Team Grade = (70% * 68%) + (30% * 91%) = 75%

<table>
<thead>
<tr>
<th>Name</th>
<th>Points</th>
<th>Grade</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam</td>
<td>120</td>
<td>90%</td>
<td>A+</td>
</tr>
<tr>
<td>Micah</td>
<td>110</td>
<td>83%</td>
<td>A-</td>
</tr>
<tr>
<td>Gibson</td>
<td>60</td>
<td>45%</td>
<td>F (course grade)</td>
</tr>
<tr>
<td>Mario</td>
<td>90</td>
<td>68%</td>
<td>B-</td>
</tr>
<tr>
<td>Dawn</td>
<td>110</td>
<td>83%</td>
<td>A-</td>
</tr>
<tr>
<td>Mandy</td>
<td>110</td>
<td>83%</td>
<td>A-</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>75% (mean)</td>
<td></td>
</tr>
</tbody>
</table>

Lab Book (per group)

- 4 bound notebooks (2 per student).
  - One for labs 1 & 3
  - One for labs 2 & 4
  - One project lab book per student
    - Detailed notes of ALL project work done by student
- Group number on front cover.
- Staple in loose sheets
  - printouts
- Insert sticky-note on first page of lab report.
  - Otherwise, returned UNMARKED
- Late labs
  - Complete = 50%
  - Incomplete = 0%
Lab Assignments

• First page of lab assignment
  – Write down verification steps (for TA to initial)
• Steps printed in **bold** must be documented in your lab book (marked).
  – Provide step number.
  – Eg. **C7**: \( R = \frac{V}{I} = \frac{12V}{3mA} = 4\Omega \approx 3.9\Omega \)
• “Sketch” means calculate and include component values.
• Demo steps listed in “Demonstration” section to lab TA.
  – TA will initial front page
  – Don’t dismantle until verified!
Week #1 – Now!

- Today
  - Lab Group / Design Team selection
    - Your card is your team (e.g. Jack of hearts)
    - Exact match is your lab partner (e.g. Jack of hearts – Canada)
    - You may trade but DO NOT CHANGE YOUR SUIT (hearts, diamonds, clubs, spades)

- Thu / Fri
  - Shop safety training (mandatory)
    - Bring safety quiz – machinist will initial to certify training completed
    - Bring risk assumption form
  - Schedule posted on website (by Team name)
  - Parts / tools purchase
    - $120 cash (KAIS 5500 - Sara)
    - Bring exact change
Week #2

- Monday
  - Design project announced
- Tues / Wed (exact time to be announced by email)
  - Parts / tools pickup (MCLD 112B)
    - 1 student per team only
    - Bring all 6 receipts
  - First design project team meeting
  - Sit at designated bench
    - TA will record team members
  - Hand in safety forms to TA
    - Must score 100% to work in Machine Shop or Thunder Lab
- Thu / Fri
  - Lab #1

Labs

- Electronics Lab
  - MCLD 309 (Ace → 6)
  - MCLD 322 (7 → Joker)
- Thunder Lab
  - 24/7 Access
- Lightning Lab
  - PCB Prototyping
  - Stereo Lithography
Team Selection

- Section 101 ♠
- Section 102 ♣
- Section 103 ◆
- Section 104 ♥

Blue
Red
Canada