**Timeline (Example)**

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| --- | --- | --- | --- | --- | --- |
| Lab # | Date | Device 1 | Device 2 | Device 3 | PM/Float |
| 1 | 17 Jan | Admin | | | |
| 2 | 24 Jan | Brainstorm concept ideas, questions for client | | | |
| 3 | 31 Jan | Schematic approved1 | Schematic approved | Sensor ID  Dummy ID | Parts ordered |
| 4 | 7 Feb | Parts ordered.  Power supply prototyped and tested2 | MP3 recorder tested w/ Arduino3  Prototype test | Accelerometers tested w/ Arduino | Dummy vest ID |
| 5 | 14 Feb | PCB layout, order parts | PCB layout, order parts | UI layout in C# | MP3’s create |
| 6 | 21 Feb | PCB wait – float  Arduino ICP prototype & test | PCB wait - float | C# PC program communicate w/ Arduino |  |
| 7 | 28 Feb | PCB populate, test. | PCB populate, test | User’s manual layout format, outline sections |  |
| 8 | 7 Mar | PC redesign and resubmit for SP work?4  Order additional parts as needed | PCB redesign and resubmit for SP work?  Chassis wiring  Figure out interconnects, sensor mounting | Make uC enclosure w/ sensor connections, mount switches, PCBs |  |
| Spring Break | | | | | |
| etc. some weeks at end should be slack (for unexpected problems earlier), writing up reports, cleaning lab | | | | | |

Green: graded review

Red: graded review + client meeting

We never write “work on” as a goal, but rather a testable outcome. E.g. not: “Work on manual”, but “Complete manual outline”

1 Note: Not “Schematic made”, but “schematic (instructor) approved”. Two very different standards; a schematic that can’t work is not a completed goal but a wasted week. This requires a significant amount of out-of-lab interaction with the instructor.

2 Note: Not “prototyped” but “prototyped and tested”. Two very different standards; to prototype it and get it working requires a significant amount of debugging and redesign work since prototypes almost never work the first time, and may fail because of either prototyping mistakes or design mistakes in the schematic that weren’t caught.

3 Note: Test uncommon component assemblies at earliest possible moment. Don’t wait for another group to design a signal conditioning or mechanical assembly for them…it may be that the sensors won’t work in the environment you envisioned, or that you can’t talk to them, or they are defective, and waiting for the assembly they plug into to be finished (working in serial) rather than in parallel will waste two group’s time.

4 Note: By placing the PCB test date two weeks before spring break, we enable one week to redesign and resubmit the PCB design so the PCB manufacturing company can complete it during our spring break