# Assignment: Tracking Progress

## Week-by-week Schedule

| Week | Dates | Phase | Task |
|---|---|---|---|
| 1 | 1/8 - 1/14 | Design | ☑ Filter |
| 2 | 1/15 - 1/21 | Design | ☑ Comparator |
| 3 | 1/22 - 1/28 | Design | ☑ Comparator<br>☑ 3-feature AFC at LF (functionality) |
| 4 | 1/29 - 2/4 | Design | ☑ Filter |
| 5 | 2/5 - 2/11 | Design | ☑ Filter<br>☑ Bias current divider |
| 6 | 2/12 - 2/18 | Design | ☑ Filter<br>☑ Comparator |
| 7 | 2/19 - 2/25 | Design | ☑ Comparator |
| 8 | 2/26 - 3/4 | Design | ☑ Filter<br>☑ Comparator<br>☑ Calibration circuitry |
| 9 | 3/5 - 3/11 | Design | ☑ Time-domain envelope detector |
| 10 | 3/12 - 3/18 | Design | ☑ Integrate-and-fire |
| 11 | 3/19 - 3/25 | Design | ☑ All analog blocks |
| 12 | 3/26 - 4/1 | Design | ☑ 1-feature AFC |
| 13 | 4/2 - 4/8 | Design | ☑ Calibration |
| 14 | 4/9 - 4/15 | Design | ☑ cmp_grid |
| 15 | 4/16 - 4/22 | Design | ☐ chip_minus_pads_minus_digital<br>☐ 3-feature AFC |
| 16 | 4/23 - 4/29 | Design<br>Layout | ☐ Pad frame, serializer, scan chain<br>☐ Blocks |
| 17 | 4/30 - 5/6 | Design<br>Layout | ☐ Pad frame, serializer, scan chain<br>☐ Blocks |
| 18 | 5/7 - 5/13 | Design<br>Layout | ☐ Pad frame, serializer, scan chain<br>☐ System |
| 19 | 5/14 - 5/20 | Design<br>Layout | ☐ Pad frame, serializer, scan chain<br>☐ System |
| 20 | 5/21 - 5/27<br>trial: 26th | Verification | ☐ Full-chip simulation<br>☐ Work through tapeout checklist |
| 21 | 5/28 - 6/3<br>final: 2nd | Verification | ☐ Full-chip simulation<br>☐ Work through tapeout checklist |
| 22 | 6/4 - 6/10<br>tapeout: 9th | Margin | ☐ Margin |

## Progress Summary

| Hierarchy level | Cell | Schematic-level design+sims | Layout | Post-layout sims |
|---|---|---|---|---|
| 1 | Filter | 100% | 0% | 0% |
| 1 | Current divider | 100% | 0% | 0% |
| 1 | Comparator | 95% | 0% | 0% |
| 1 | Trianglewave generator | 85% | 0% | 0% |
| 1 | Integrate-and-fire | 90% | 0% | 0% |
| 1 | Counter | 0% | 0% | 0% |
| 1 | Serializer | 0% | 0% | 0% |
| 1 | Scan chain | 0% | 0% | 0% |
| 2 | Filter bank | 100% | 0% | 0% |
| 2 | Comparator grid | 100% | 0% | 0% |
| 2 | XOR array | 0% | 0% | 0% |
| 2 | Integrate-and-fire array | 0% | 0% | 0% |
| 2 | Counter array | 0% | 0% | 0% |
| 3+ | chip_minus_pads_minus_digital | 40% | 0% | 0% |
| 3+ | chip_minus_pads | 0% | 0% | 0% |
| 3+ | chip | 0% | 0% | 0% |
| flat | 1-feature AFC | 80% | n/a | 0% |
| flat | 3-feature AFC | 10% | n/a | 0% |