

Course Calendar

| Week | Topic | Day 1 | Day 2 | Day 3 |
|------|---|--|---|--|
| 1 | Github/Python/Object Oriented programming | Classes introduction | More with OOP, methods, and <code>__init__</code> , methods, propperties. Begin git. | git: commits, branches, pull-requests, working as a team, begin first git projects |
| 2 | Introduction to WPILIB and APIs | End first project, and then work on uploading robotpy and wpilib | Spring Visits Introduction to poses. How are poses recorded, introduction to gyro and angles. How are robots programmed intro to the methods and file structure of common frc robots | Spring Visits Project 1: Programming ROMI to drive |
| 3 | Introduction to Robot code (Timed Robot) | Intro Class Time for Project 1: LineFollower | More Time for LineFollower Project | DCMP |
| 4 | Using Encoders and Gyros to update robot position | No HW Due Review for Test 1 / Complete LineFollower | Test 1 | Intro to the Gyro and Encoders |
| 5 | Encoders | Encoders | (WORLD5) | Midterm (WORLD5) |
| 6 | Gyro | Make up day | Gyro | NO CLASS: Long Weekend |
| 7 | Gyro, PID, and Protocols | Protocols, PIDControllers, and Gyro | Gyro Project Day 1 | Gyro Project day 2 |
| 8 | Unit Testing and PID Controllers | Test Review | Test 2 | Unit Testing 1 |

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|------|--|----------------|-----------------|----------------------------|
| 9 | Command Based Robot Autonomous Command Project 2 | Unit Testing 2 | Command Robot | Final project outline |
| 10 | Final Project | Final Project | Final Project | NO CLASS: Prize Day |
| 11 | Final Project Presentations | TEE | NO CLASS | NO CLASS |