

Programming Subteam Topics List

*Pre-test

- General Programming: (Small 5 qs. Quiz after every topic)
 - Objects
 - Inheritance
 - Modifiers
 - Operations
 - Loops and logic

*Unit Test

*Project 1: Simple algorithms and inheritance

**From now on they *could* write code without a ton of compiler errors

- DOCUMENTATION SURPRISE
 - Method table
- WPI Lib: (Small quiz after every topic)
 - What is WPI Lib
 - Hardware
 - RobotMap.java
 - OI.java
 - Given Structure (Given abstract classes)
 - Init, interrupted, etc
 - Command Based Programming
 - Basics
 - RobotMap.java (Review)
 - Robot.java
 - OI.java
 - Sub Systems
 - DriveTrainSubsystem, GearSubsystem etc
 - Commands
 - Basic:
 - Very basic within Subsystem classes
 - Intermediate:
 - DriveDistance, time etc.
 - Advanced (Command groups):
 - Major commands such as autons
 - *Unit Test
 - *Project 2: Write your own auton that does specific movements

**From now on, they are ready to program the robot

- Extended studies:
 - Flow and simplicity
 - Structure of a good program
 - Programming habits

- How to document code
- Mechanical and electrical integration
 - Basics of electronic components
 - Physics of the drivetrain and mech
 - Sensors and simple EE
- Advanced programming
 - Ease of use of drivers and operators
- TBD