

Closing the *first* Design Loop

135 minutes / 3 = 45 minutes - 5 minute break = 40 minutes

135 minutes / 2 = 67 minutes - 7 minute break = 60 minutes

Monday / Wednesday

2/22/21

Rooms

- | | | |
|---|---------------------------|------------------|
| 1 | MarioBot | |
| 2 | Thumper | |
| 3 | DeRobot (Time Permitting) | PaperBot "Class" |

2/24/21

- | | | |
|---|-----------------|------------------|
| 4 | Team Ugly Blues | PaperBot "Class" |
| 5 | Team Dragonbot | PaperBot "Class" |

Tuesday / Thursday

PaperBot "Class"

2/23/21

Rooms

- | | | |
|---|-------------------|--|
| 1 | Green | |
| 2 | Blubot / Hero bot | |

2/25/21

- | | | |
|---|-------------|--|
| 3 | Houndbot | |
| 4 | Team Orange | |

Written Document - Due 2/24/21 for MW and 2/25/21 TuTh @ 6:00pm

PowerPoint Presentation - Due the morning of your presentation date

Conceptual Design Review

Written Document (single project document which clearly shows individual responsibilities)) w/ accompanying PowerPoint (Single Powerpoint presented in four individual sections.)

Title Page/Slide

Project

Names w/ Functional Responsibility

Standard Project

Card Reader

- Objective
- Research
 - Previous work
 - Sensors of this type compared.

- Conceptual Design Solution
 - Sensor (Specification, Circuit Solution(s), Back of the Envelope Calculations)
 - Software (Block Diagram, Flow-card, UML, Pseudo-code)

Navigation

- Objective
- Research
 - Previous work
 - Sensors of this type compared.
- Conceptual Design Solution
 - Sensor (Specification, Circuit Solution(s), Back of the Envelope Calculations)
 - Software (Block Diagram, Flow-card, UML, Pseudo-code)

Control

- Objective
- Research
 - Previous work
 - Sensors of this type compared.
- Conceptual Design Solution
 - Control Technique (Block Diagram of the Control Loop, Plant Model, Control implementation (probably PID)).
 - Sensor (Specification, Circuit Solution(s), Back of the Envelope Calculations)
 - Software (Block Diagram, Flow-card, UML, Pseudo-code)

Game Software

- Objective
- Research
 - Previous work
 - Methodology for mapping phase/execution phase
- Conceptual Design Solution
 - Algorithms and methods considered (example: tree traversal algorithm)
 - Software (Block Diagram, Flow-card, UML, Pseudo-code)

Concluding Thought

- Missing Level 1 Requirements
- New Level 2 Requirements

