

## 2019 PC/CP320 Integration Project Checklist (Winter)

- Basic requirements

- A. Sensors and Actuators

1. gets input from environment \_\_\_\_\_
2. makes changes in environment based on inputs \_\_\_\_\_
3. distance sensor (ultrasonic or infrared) \_\_\_\_\_
4. *other* input device (i.e. *multivalued*) \_\_\_\_\_
5. one motor (DC, stepper, or servo) \_\_\_\_\_
6. *User* output (i.e. *proportional* operation) \_\_\_\_\_

- B. Software

1. interacts with *operator* (on computer) \_\_\_\_\_
2. modular (explicit functions for *each* device) \_\_\_\_\_
3. no magic numbers \_\_\_\_\_
4. self-explanatory variable and function names \_\_\_\_\_

- C. Documentation

1. circuit overview \_\_\_\_\_
2. clear block diagram (identifying signal types) \_\_\_\_\_
3. *explanation of each block* ( $3\times$  *weight*) \_\_\_\_\_

Note: All interactions with the operator and the environment must be related; environment input should affect output to operator and input from operator should affect output to environment.