# AME 3623: Project 7 Group Grading Rubric

# April 3, 2020

Group number:

Team member names:

Team member(s) claiming software component:

#### Implementation: 35 points

# PD-control: 12 points

- (12) Fully meets the given specification.
- (6) Fails to meet one aspect of the specification.
- (0) Does not meet the given specification.

# LED state display: 10 points

- (10) Fully meets the given specification, including: displaying rotation rate and heading error.
- (5) Fails to meet one aspect of the specification.
- (0) Fails to meet two or more aspects of the specification.

#### camera\_step(): 13 points

- (13) Fully meets the given specification, including: computing the lateral position and velocity.
- (7) Fails to meet one aspect of the specification.
- (0) Fails to meet two or more aspects of the specification.

### Demonstration: 30 points

# Orientation error and rotation rate display: 10 points

- (10) The orientation error and rotation rate are reflected by the LEDs.
- (7) There is one problem with the display.
- (4) There are two problems with the display.
- (0) There are more than two problems with the display.

# PD controller: 10 points

- (10) The PD controller pushes the craft toward the goal and is well-tuned.
- (7) There is a small problem with the PD controller (e.g., it works but it is not well tuned).
- (4) The PD controller is recognizable, but there are serious problems (e.g., selected parameters are poorly tuned or the heading error computation does not handle wrap-around correctly).
- (0) The PD controller does not work.

### Lateral state printing: 10 points

- (10) Both the lateral position and velocity are printed, and are well calibrated.
- (5) There is a problem with the reported positions and velocities.
- (0) There are substantial problems with the printed positions and velocities.

# Documentation: 35 points

# Project documentation: 5 points

- (5) All required project-level information is given at the top of the C and H file(s), including: project number, date, group number, group members, and the group member responsible for the code.
- (3) One required piece of information is missing.
- (0) Two or more required pieces of information are missing.

#### Function header documentation: 15 points

- (15) All functions are documented with a high-level description, a description of each of the parameters, and a description of the return value (where appropriate).
- (10) One function is not documented properly.
- (5) Multiple functions are not documented properly.
- (0) Function header documentation is not given.

# In-line documentation: 15 points

- (15) All functions include appropriate in-line documentation ("appropriate" means that you capture the logic of a line of code or group of lines).
- (10) One function is missing in-line documentation.
- (5) Multiple functions are missing in-line documentation.
- (0) No in-line documentation is given.