

Real-Time Control

Name or Team: *your-info*

This assignment has you design and implement a PID controller and tune its parameters for optimal control of an unknown plant.

Dimension	Exceptional Performance 4	Competent Performance 3	Acceptable Performance 2	Developing Performance 1	Beginning Performance 0
Discussion of Experiment (40%)	The experimental procedure and observations are discussed and a clear and complete fashion.	There are only minor issues with the discussion of the experimental procedure or observations.	There is discussion of the experimental procedure and observations, but not at a sufficient level of detail.	The discussion of either the experimental procedure or the observations is significantly lacking.	There is no discussion of experimental procedure, or observations.
Test Data (30%)	All test data is provided with plots and the requested derived quantities.	There are only minor issues with the test data presentation.	There is a significant problem with at least one element of the test data presentation	Only the optimal tuning parameters are given.	No test data is given.
Test Fixture Implementation (15%)	The test fixture is fully implemented in a way that follows sound real-time practices. The fixture adheres to coding standard and documentation practices.	The test fixture functions, but there are minor issues with use of coding standards or documentation.	The test fixture has minor issues with functionality, or a noticeable lack in using coding and documentation practices.	The test fixture has significant functionality problems, or is designed with little concern for real-time issues.	The test fixture does not appear to function.
Report Mechanics (10%)	Report has an excellent organization and presents material in a very logical sequence. No spelling or grammar errors, excellent formatting, highly readable.	The report can be followed easily and all material is present. Spelling and grammar errors rare, excellent formatting	All material is present in the report, but there are issues with the presentation. Spelling, grammar, and formatting errors appear on several pages but do not interfere with readability.	There are significant issues with coherence and ordering. Significant material is missing. Few pages without mechanics errors making reading a chore. Readability is a significant problem.	The report has no apparent organization or logical order. Mechanics errors make it a struggle to decipher meaning.
Submission Mechanics (5%)	All materials were properly submitted and could be accessed without any issues.		All materials were submitted. There were only minor issues with accessing the materials.	Only a minor omission from the submission, or it took noticeable effort to access the material.	Significant problems exist with accessing material or material is missing from the submission.