ENGR 4580 Midterm Presentation Grading Rubric

Team name:	
Project Overview (2 min) □ Define problem and main goals/requirements □ Show & cite any relevant current technology or standard industrial equipment □ Show and explain system flow diagram □ Show anticipated milestones/timeline & clearly explain direction forward	_____/5
Structural Design (2 min) □ Show full CAD assembly with labeled components/subsystems □ Explain each subsystem and major dimensions □ Selected appropriate materials for construction □ Overall setup and design make sense	_____/5
Mechanical Design (1.5 min) □ Show and explain 1-2 most important actuator calculations (motors, cylinders, pumps, etc.) with legible FBDs and equations □ Actuators & wheels selected are appropriate for type of motion desired □ Transmissions/gearboxes/couplings etc. are chosen if needed □ System looks like it will work	_____/5
Electrical Design (1.5 min) □ Identified variables to measure and chose appropriate sensors □ Selected appropriate drivers, shields, E-stops, and other safety components □ Show wiring diagram(s) for sensors and actuators □ Power source (battery or supply) is calculated and selected	_____/5
Control Design (1 min) □ Identify user interface plan and show initial sketches/screens □ Show flowchart, or outline for code (not screen shots of typed code), or ladder logic for PLC	_____/5
Presentation Grade	_____/25
Conduct Requirements – Penalties if Violated □ Clear verbal volume and pronunciation, every teammate spoke, eye contact □ Presentation is punctual, no technical difficulties or running overtime (8 min)	penalty? ___ penalty? ___
Bonus – Functioning Prototype or Simulations *All are needed by the end of the semester, but bonus if they happen now* □ One or more subsystems are built □ One or more subsystems demo functionality □ System kinematics are simulated in MATLAB □ Fluid or stress/strain analysis is simulated in CAD	_____/5

Comments: