## Final Demonstration Grading Rubric – ECEN5623, RT Embedded Systems

Rubric	Score [010]	Notes
Report and demo professionalism		
Final Demo or Upload Organization with updates:		
System block diagram		
2. Capability and Real-time requirements – S,		
WCET, T, D		
3. RT analysis – feasibility, response jitter, and		
real-time service execution time		
4. Proof-of-concept demonstration and testing		
<ol><li>Coverage of specific points for <u>final</u></li></ol>		
<u>assignment</u>		
<b>Technical content</b> – error free, in depth, presented		
clearly, and debug work		
Adherence to Standards – follows real-time and		
functional requirements presented as goals in		
original proposal; follows Rate Monotonic (RM, EDF,		
LLF and BE) scheduling policies and methods to		
determine feasibility and safety		
<b>Response to Questions</b> - admission of unknowns,		
concise, confident		
<b>Updated detail</b> – references to report, backup slides,		
code, models		
<b>Testing</b> – time-stamp tracing for WCET, profiling,		
deadline misses / request		
MINIMUM goals met		
1. 1 Hz, non-blurry, unique, monotonic		
seconds, no observed errors		
2. PPM with timestamp (well correlated)		
3. 180 frames at 1 Hz, 2x or more reliable		
TARGET goals met		
1. Runs 10 Hz or 1 Hz PPM save rate		
2. Additional feature enable/disable		
3. Re-run MIN tests, changes noted		
STRETCH goals met		
1. Run at 10 Hz, non-blurry, unique,		
monotonic to 1/10 <sup>th</sup> of second, 2x or more		
2. Tested and proven design for no observable		
errors and reliable, predictable response		