

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

96/100

Rubric	Score [0...10]	Notes
Report and demo professionalism	10	Excellent
Final Demo or Upload Organization with updates: <ol style="list-style-type: none"> <li>1. System block diagram</li> <li>2. Capability and Real-time requirements – S, WCET, T, D</li> <li>3. RT analysis – feasibility, response jitter, and real-time service execution time</li> <li>4. Proof-of-concept demonstration and testing</li> <li>5. Coverage of specific points for <a href="#">final assignment</a></li> </ol>	9	RT (core 3) – seq, read-frame, write-frame  BE (core 2) - status
Technical content – error free, in depth, presented clearly, and debug work	9	Htop and sysprof verified
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	10	AMP  RM policy for prio assignment
Response to Questions - admission of unknowns, concise, confident	10	Direct answers with unknowns admitted
Updated detail – references to report, backup slides, code, models	9	New syslog tracing
Testing – time-stamp tracing for WCET, profiling, deadline misses / request	9	Syslog analysis done and will update with latest
MINIMUM goals met <ol style="list-style-type: none"> <li>1. 1 Hz, non-blurry, unique, monotonic seconds, no observed errors</li> <li>2. PPM with timestamp (well correlated)</li> <li>3. 180 frames at 1 Hz, 2x or more reliable</li> </ol>	10	<ol style="list-style-type: none"> <li>1) First, last, no blurs seen, no skips or repeats</li> <li>2) PPM header</li> <li>3) 2x with no apparent glitches</li> </ol>
TARGET goals met <ol style="list-style-type: none"> <li>1. Runs 10 Hz or 1 Hz PPM save rate</li> <li>2. Additional feature enable/disable</li> <li>3. Re-run MIN tests, changes noted</li> </ol>	10	<ol style="list-style-type: none"> <li>1) Runs, but has blur and repeats (with X windows and VNC)</li> <li>2) Best effort status service (working on TCP streaming, but not working at this time)</li> <li>3) Status does not impact 1 Hz</li> </ol>
STRETCH goals met <ol style="list-style-type: none"> <li>1. Run at 10 Hz, non-blurry, unique, monotonic to 1/10<sup>th</sup> of second, 2x or more</li> <li>2. Tested and proven design for no observable errors and reliable, predictable response</li> </ol>	10	<ol style="list-style-type: none"> <li>1) Re-try with SSH and syslog disabled – excellent results</li> </ol>

		2) Socket communication working reliably
--	--	---

Score [0...10] - 0..4=incomplete, 5=unsatisfactory, 6=passing, 7=average, 8=good, 9=outstanding,  
10=exceptional