# Notes in ECEN 5623

Zachary Vogel

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## STuff

Homework set 2 due 2/22 excercise 3 due 3/3 2/25 quiz.

## Dynamic Priority

Power PC architecture is pretty common.

RM= bunch of blocks fitting in a suitcase.
EDF/LLF = bunch of playdoy in a suitcase.

EDF/LLF bound proof.
RM gets used when you are more concerned about safety.

best effort and RM most common.

4 approaches for software in embedded systems

1. no software, all hardware or higher someone else

2. write all your own.

3. Reuse somebody elses code, buy a commercial or open RTOS

4. Use a non-RTOS and make it work like an RTOS

book: theory, then practical.

EDF can be bad because you don't know what is going to happen when you fail without intense timing analysis.
harder to debug.
because of this, EDF isn't used as much.
EDF doesn't deal with unpredictability as well as RM.
SCHED_DEADLINE is a EDF scheduler for linux.

least laxity.
even more difficult to implement because you have to guess how much execution time is left.
overload is difficult.

tend not to be used because of the additional risk.

If a system is going to fail and explode anyway, wouldn't EDF or LLF be worth it?

For a lightly loaded system (i.e. lots of slack time), RM will generally give the same result as EDF/LLF.

The more harmonic something is, the more likely RM, LLF, and EDF are to be the same.

next time: applications of RM theory.