

# Real-Time Systems

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<http://www.cse.unl.edu/~goddard/Courses/RealTimeSystems>

## Real-Time Systems

- ◆ Real-Time Systems
  - » 2:00-3:15 TuTh
  - » Avery 118
- ◆ Instructor: Steve Goddard
  - » Office hours: 12-1:30pm Tu, 12-1:30pm Thu
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  - » e-mail: [goddard@cse.unl.edu](mailto:goddard@cse.unl.edu)
- ◆ Text
  - » *Real-Time Systems*, Jane W.S. Liu, Prentice Hall, 2000

## What will you learn?

### And how?

- ◆ Principles of Real-Time Systems
  - » Mainly real-time scheduling theory
  - » The goal is deterministic behavior (predictability)
    - This is very different from a general purpose OS
    - Systems have both *logical* and *temporal* correctness!
  - » Primarily through
    - Liu's book
    - Homework and programming assignments
    - Semester project
  - » We will also read and discuss research papers

## Grades

- ◆ Homework and Programming: **20%**
  - » 3 homework/programming assignments
- ◆ Semester Project: **30%**
  - » Experimental or theoretical
- ◆ Midterm: **20%**
- ◆ Final: **30%**
  - » Comprehensive
- ◆ Classroom Participation: **up to half a letter grade**

## Projects

- ◆ Define your own project and write a proposal
  - » Experimental investigation requires a programming project and a final report
  - » Research a topic and write a paper
  - » Publishable results would be great!
- ◆ Team projects are allowed, but they must be significant!