## Lec19 IAM550 J. Raeder 11/04/2019 Review

## Announcement:

- Midterm II scheduled for Thursday, November 7, during class time, 60 minutes.
- Your combined midterm grade will be the maximum of both midterms.

## All on the blackboard or real time MATLAB

- Vectors and matrices, indexing
- How to fill a vector with values (zeros, ones, 'colon lists')
- How to generate random numbers (rand)
- For loops
- While loops
- Linear mapping  $(0,1) \rightarrow (a1,a2)$
- Conditional statements: if elseif else end
- Logical operators  $== \sim = <> <= >= \&\& \parallel \sim (eq ne lt gt le ge and or not)$
- Integration: Riemann, Trapezoidal, Simpson 1/3 rule
- Taylor series and calculating power series expansions (exp)
- Functions, parameters, return values, locality