## Lec16 IAM550 J. Raeder 10/24/2019 Rehash arrays, loops, functions

## Announcement:

• Midterm II scheduled for Thursday, November 7, during class time, 60 minutes.

## **Review Exam.**

## All on the blackboard or real time MATLAB

- Rehash loops, assignments in vectors.
  - Vectors  $\rightarrow$  1d arrays
  - o Create array: assignment, sequence, zeros, ones, rand
  - o 2d arrays
  - how to index array, left, right side
  - for loops: sum array, dot product, matrix product, a+s\*b
- More on for loops
  - Loop over anything in a vector
  - Loop over string arrays
  - Nested loops
  - Translate sums into loops  $\rightarrow$  Fourier sum
- More on for loops
  - Histogram (cubed random numbers, Ex1\_grades.txt)
  - Show cubing as for loop or vector operation
  - Plot histogram  $\rightarrow$  bar() function
  - o Random walk / drunken sailor histogram
  - Population age histogram