ENGR 1120 Lecture Chapter 2 - Vectors and Matrices

- ## MATLAB is the *Matrix Laboratory*

  - – previously we have been using *scalars*

  - – the default data type is a double precision *matrix*

  - – a matrix is a container (variable) for storing multiple values under the same name

  - – we will begin with *1 - Dimensional* **matrices.** **aka** - *array* **or** *vector*

- **using** *1D matrices* **in MATLAB**

  - **Initilization of an Array**

  - **Accessing**

  - **Assignment**

  - **Re-Assignment , aka Overwrite**

- **compared to** *scalars* **in MATLAB**

  - **Initilization of an Array**

  - **Accessing**

  - **Assignment**

  - **Re-Assignment , aka Overwrite**

- **some important vocab**

  - **elements** of an **Array**

  - **index** of an **element**

  - **size** of an **array**

  - **shape** of an **array**

- some useful functions for 1D arrays

  – length()

  – size()

  – sum()

  – min()

  – max()

  – plot()

  – and many more...