CE 3372 – Water Systems Design
Exercise 1

Purpose

- Access to the class website and upload completed exercises as .PDF files.
- Use web resources and supplied readings to self-teach about water systems.

Exercises

1. **Water Use Descriptions**

   Consult the readings (Chin, 2006; Mays, 2011; Wurbs, 2002) for Lecture 1 and use your findings to complete the water use descriptions in Table 1, below.

Table 1: Water Use Categories

Water Use Category	Description
Domestic Use	Water for household needs: drinking, food preparation, personal hygiene, washing clothes and dishes, flushing toilets, and watering lawns and gardens (also called residential use)
Commercial Use	
Irrigation Use	
Industrial Use	
Livestock Use	
Hydroelectric Use	
Recreational Use	
Navigation (Inland) Use	

2. **Climate Conditions – 1**

   Consult Chin (2006) and use your findings to complete the climate range table, Table 2 below in U.S. Customary units as indicated.

Table 2: Climate Description, Precipitation, and Evapotranspiration

Climate Description	Mean Annual Precip. (inches)	Mean Annual Evap. (inches)
Superarid	< 4	< 118
Hyperarid		
Arid		
Semiarid		
Subhumid		
Humid		
Hyperhumid		
Superhumid		

3. **Climate Conditions – 2**

   Use the internet and locate values of mean annual precipitation and mean annual evapotranspiration for Lubbock, Texas; Albuquerque, New Mexico, and Houston, Texas. Using Table 2 you constructed above, classify the climates of these three locales.

References

Chin, D. (2006). *Water Resources Engineering, 2 ed.* Prentice Hall, Inc. pp. 1–8 `http://www.rtfmps.com/documents/university-courses/ce-3372/3-Readings/Chin1-8/`

Mays, L. W. (2011). *Water-Resources Engineering.* Wiley. pp. 1–11 `http://www.rtfmps.com/documents/university-courses/ce-3372/3-Readings/Mays1-11/`

Wurbs, R.A., and James, W. P. (2002). *Water Resources Engineering* Prentice Hall. pp. 1–33 `http://www.rtfmps.com/documents/university-courses/ce-3372/3-Readings/Wurbs1-33/`