

## CPET-233 Digital Systems Design Fall 2019

## Homework #1 – Due 9/4/19 Please submit a hard copy or put in the Dropbox in MyCourses

All of these tasks should be completed AS A GROUP (i.e. in person).

- 1. Create a team expectations contract. The purpose of this contract is for your use and your benefit. The more thorough you are, the better the chance for success. Things to consider are:
  - Expectations for preparation. For example do you expect each member to try the assignment on their own before meeting as a group, etc.
  - Expectations for attendance
  - Expectations for participation
  - Expectations for communication

Please take this assignment seriously. If you do not put much effort into it, you may be asked to do it again. You can google "team contract" or "team agreement" to get example contracts.

Each group member must sign the contract to indicate their agreement with the expectations.

- 2. Choose a time that is mutually convenient for the group to get together each week. You should also choose a second time to get together in the event you do not finish the assignment in the first meeting. Add these times to your contract.
- 3. Complete the following problems:
  - Convert the following binary numbers to decimal
    - a) 011001<sub>2</sub>
    - b) 011101<sub>2</sub>
    - c) 1011100<sub>2</sub>
    - d) 01101000<sub>2</sub>
    - e) 11101011<sub>2</sub>
  - Convert the binary numbers above to hexadecimal