This semester you will complete the preliminary design for a water reclamation facility (WRF). The WRF is anticipated to include the following elements:

- Influent pump station
- Flow meter
- Mechanical bar screen
- Grit removal
- Primary clarifier
- Activated sludge basin
- Secondary clarifier
- Coagulation, flocculation, and sedimentation
- Filtration
- Disinfection

The project will be accomplished in discrete phases, as follows:

- Development of design data
- Preliminary & primary treatment system design
- Secondary treatment system design
- Tertiary system design

Each phase must be submitted with a technical memorandum. Each subsequent phase of the project must build upon and include the previous technical memorandum(s)....thus, at the end of the semester you will have a complete project technical memorandum.

**Some Project Specifics:**

- Reclaimed water discharged to a river – permit information to be provided

Each of your design memorandums should include:

- Design calculations
- Pertinent manufacturer data
- WRF schematic diagram
- Hydraulic profile – as appropriate
- Technical memorandum

**Technical Writing Guidance:**

Write your memo such that I am not FORCED to review your calculations. Good writing communicates the critical elements of a design without requiring your client to dig through calculations.