## **Breadth Topics**

## **Architectural Breadth**

An architectural breadth will be done for the Tyler School. The use of energy recovery requires centralized exhaust systems. The Tyler School is difficult because the various departments create a scattered localized exhaust. The Tyler School department layouts will be reconsidered in a way to maximize the use of energy recovery. The goal is an energy efficient architectural building layout. The redesign will not eliminate any of the programs and spaces in the present design. The design should maximize the space and flow throughout the building.

## **Construction Management**

The addition of DOAS and chilled beams will significantly affect the mechanical cost of the building. A detailed cost estimate will be performed, which will be compared to the original mechanical design. The cost estimate will include a payback period analysis for the energy savings associated with the use of the DOAS/chilled beams coupled system. The schedule for the redesign will be assessed with the use of Microsoft Project. This assessment will focus on potential scheduling setbacks with the system redesign.