

# Business Instructional Facility, #1206

**Building Gross Sq.Ft.:** 162,250

**Campus Energy Rank FY12:** 53

**Retrocommissioned:** July 2013 -Nov 2013



**Principal Building Use:** Classrooms, offices, auditorium

**Facility Contacts:** Kari Cooperider & Carol Young

## Building & Occupant Overview

The Business Instructional Facility provides a sense of place to College of Business students and has become a home for alumni. This facility provides a large amount of space to accommodate state-of-the-art classrooms, career development and academic counseling centers, student program offices, a recruitment suite, a 300-seat auditorium, and space for students to meet and study. Sustainable design elements and environmentally-friendly features led the facility to achieve LEED certification and set new standards for green buildings.

There are 2 dedicated outside air units serving 6 air handling units. Both DOAs have energy recovery wheels. All AHUs and DOA2 are cooled with campus chilled water and use hydronic heat. There are also 2 makeup air handling units to serve the atrium in the event of a fire.

The facility's total metered energy during FY12 was 19,954 MMBTU.

## Retrocommissioning Specifics & Results

Low VOC adhesive on armaflex insulation caused splitting, so these were repaired using armaflex tape. Steam leaks through poor gaskets were repaired at the steam entrance and insulation was replaced. Door seals and sweeps were added to doors to prevent air migration and maintain humidity levels. Unnecessary mechanical room exhaust fans were turned off, seeing as they had been exhausting conditioned air and making the room negative. Additional leaks in the building envelope will be addressed by an architectural consultant.

Many VAV temperature sensors were reinstalled due to poor initial installation. Temperature and humidity sensors for all equipment were tested and recalibrated if necessary. Ventilation rates and schedules were adjusted in an attempt to prevent windows in classrooms from being opened. Tighter space temperature control was programmed throughout the building.



## Project Highlights

- CO2 sensors controlling HVAC equipment were replaced.
- Repaired the chilled water valve on DOA-2, which was found to be stuck open.
- Dedicated outside air AHUs were repaired because air was short cycling through failed canvas connections.
- VAV damper actuators were remounted on most VAV boxes due to broken supports.
- Several occupancy sensors were wired to control the VAV system for classrooms.
- Coordination was achieved to prevent heating from reheats & perimeter heating during cooling mode for classrooms.