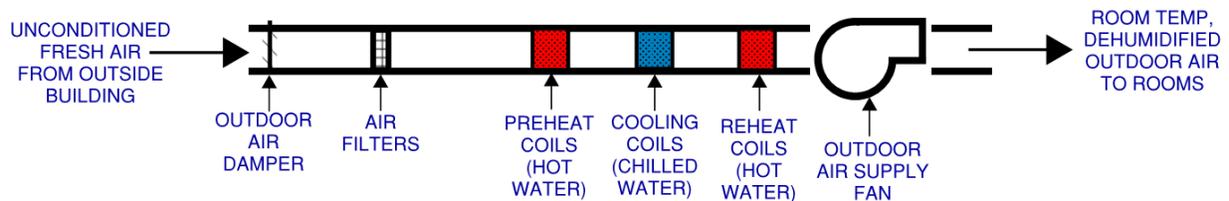


## **LECONTE HALL**

LeConte Hall is served by two separate air distribution systems, one for providing ventilation air to the building and the other for space heating and cooling. LeConte's HVAC systems were renovated in 1995.

### **VENTILATION SYSTEM**

The ventilation system can be thought of as a whole-building fresh air system that brings in outside air, dehumidifies and conditions it to a moderate temperature, and distributes it throughout the building via ductwork to each Fan Coil Unit where it is combined with recirculated room air before being heated or cooled as needed and delivered to each office or classroom. This also includes a controlled exhaust which provides exhaust at restrooms on each floor to control odors and maintain appropriate building pressurization.



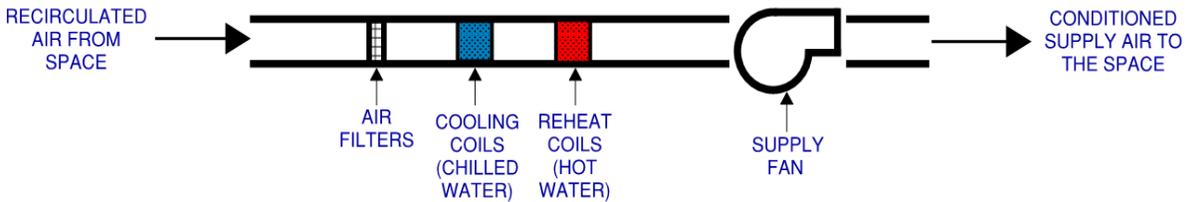
### **DEDICATED VENTILATION AIR UNIT SCHEMATIC**

### **SPACE HEATING AND COOLING SYSTEM**

The space heating and cooling system consists of greater than 50 Fan Coil Units (FCUs) located above the ceilings with supply air ductwork distributing conditioned air from each FCU to ceiling diffusers in each space along with return air ductwork to carry recirculated room air back to the FCU. Some larger rooms have their own unit, while some FCUs providing conditioned air to multiple adjacent space.

With individual FCUs serving a small number of offices (between 2 and 5) and generally one FCU dedicated to each classroom, there should be minimal room air circulated between spaces, except where room air from offices and classrooms is pulled through door undercuts into corridors and eventually exhausted through ceiling exhaust registers located in restrooms. The FCUs pull air from the space(s) they serve, condition as needed, and supply it back into the space. Both the fan in the fresh air system and the fans in the FCUs run all the time.

FAN COIL UNITS- A fan coil unit is fairly simple: it's a fan with a coil or coils (like a car radiator) that can add heating and cooling to the air stream flowing through it. The FCUs in LeConte Hall have air filters to remove particulate matter from the air, a hot water coil and chilled water coil for heating and cooling the air, and a supply fan for forced air circulation through the unit and into the space. The hot water is produced in the mechanical room by way of a heat exchanger that takes heat from the campus steam system and adds it to LeConte Hall's hot water loop. The chilled water is provided from UGA's North Campus Chilled Water District.



**4-PIPE FAN COIL UNIT SCHEMATIC**