

# Science center Offices



Heating & Cooling System Description  
and  
How it works.

SWARTHMORE COLLEGE

For Maintenance requests  
Email [workbox@swarthmore.edu](mailto:workbox@swarthmore.edu) or  
Phone X 8280

## Room Heating Tips.

Be certain that windows are shut tightly.

Don't forget the upper section of the window.

Windows that are not completely closed allow cold air into the room.

If your windows won't shut properly call Facilities Management at x8280 to report the problem.

Closing you window shades or draperies can help keep the cold out.

Don't place heat producing lamps or other appliances near the thermostat as this can fool the thermostat into reducing the heat supplied to the room.

The heat for the Science Center is supplied by steam from the boilers in the Heat Plant located across the street from the Field House. The boilers can burn either natural gas or #6 heavy oil. During the coldest weather the College can burn 5,500 gallons of oil a day to heat the various buildings. Cooling is provided by chilled water which comes from either McCabe Library or the chiller plant behind the Science Center.

Underground pipes supply the steam to many of the buildings on the Campus. After the steam is used to heat the buildings it condenses back into water that's returned to the Heating Plant to be turned into steam again.

Science Center offices are provided cooling, heating and ventilation air from vents in the ceiling. This air is supplied from various air handlers in the mechanical rooms.

Each room has it's own thermostat to control the space temperature. In offices occupants can adjust the temperature up or down to suite their needs.

College policy for heating in occupied times 68-72°. Thermostats are limited by the automation system to a maximum heating temperature of 72°. Cooling in occupied times is limited to not lower than 73°.

During unoccupied times the heating & air conditioning are reduced.

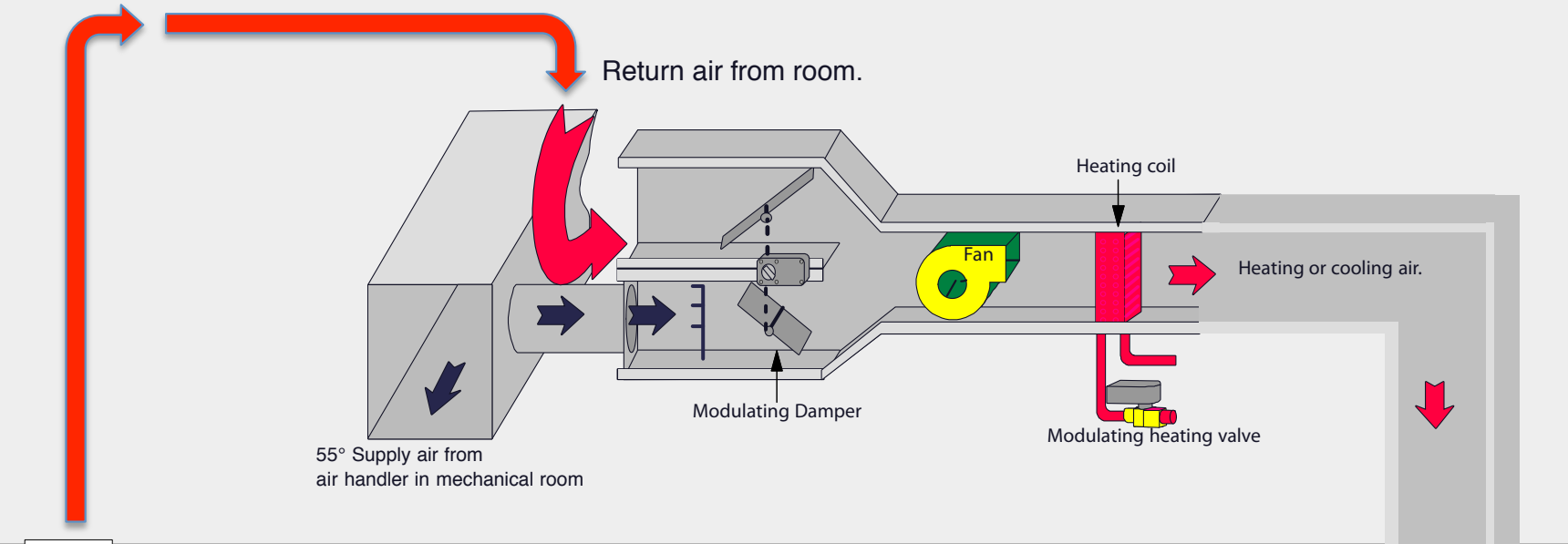
The Science Center has heating and cooling available through out the year. (air conditioning is available only when the campus chilled water system is operating).

More College energy information can be found at;

<http://www.swarthmore.edu/x29161.xml>

# Typical Office in Science Center

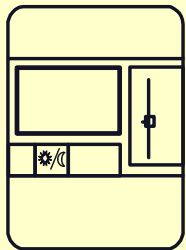
## EQUIPMENT ABOVE CEILING



Return air vent in ceiling.

## Room Ceiling

The damper opens to supply more cool air the warmer the space gets. When the space reaches temperature the damper modulates to maintain a low flow of ventilation air. When the room needs heat the heating valve opens to warm the mix of ventilation and return air. The vent in the ceiling by the window "washes" the window with warm air.



Room Thermostat

## Office Space

Present room temperature

