HEATING HELPERS

Be certain that windows and storm windows are shut tightly. If your windows won’t shut properly call Facilities Management at x2012 to report the problem. We will fix it.

Drawing the window blind will help to slow heat losses during the OFF cycles of the heating operation.

If your room has a temperature sensor in it TRY NOT to locate heat producing devices like a lamp near it. This can severely limit the heat to the building.

WHERE'S THE HEAT COME FROM?

Virtually all of the residence halls on campus are heated with steam that is produced in the Central Heating Plant and then distributed to every building via underground pipes. Not so, here.

Dickinson was originally designed to be Faculty Housing and was located off the main campus. This necessitated that it have it’s own source of heat, and unlike it’s sister halls nearby, that heat is generated locally in the basement of the building.

Dickinson has it’s own gas-fired boiler, which despite it’s remote locale is connected to and monitored by the College’s Energy Management System via the fiber optic network.

This boiler burns natural gas (as do many domestic heating systems) and burns this at the rate of 2,163,000 btu’s per hour. See the Energy Fact on reverse side for an enlightening comparison.
Steam radiators are located in every room and are capable of limited control. They are convection dependent devices and require adequate air flow to work properly. A covered or blocked radiator will not function efficiently.

Each radiator has a steam valve that permits steam to enter the radiator where the energy is released to the cast iron sections. Most of these valves have no "control top" and allow steam to freely enter the radiator when the boiler runs. Room s with too much heat can request the installation of a self-contained element that reacts to room temperature and allows for some local adjustment. Once installed, rotating the valve top counter-clockwise opens the valve to HIGH and increases the desired room setpoint. The radiator will HEAT to this temperature when the steam is available. When the valve is turned clockwise all the way to it's stop, the valve is LOW and little heat will result as the boiler runs to heat the rest of the building. If you leave your steam valve LOW and leave your room, your room will get the minimum heat needed to maintain your room at a comfortable temperature. When you turn the valve on, there is no guarantee that steam will be available at that time. Thus no guarantee that your room will begin to receive heat immediately, and in fact it may be several degrees cooler than any rooms that had their valves at a HIGH setting during the same time period or have no control top installed. This valve can be positioned anywhere between HIGH and LOW, which will control the rate at which the radiator produces heat.

There is a Steam Trap at the opposite end of the radiator, and this Trap reacts to steam and condensate. When the hot steam reaches the steam trap's temperature sensitive element it closes, thereby trapping the hot steam in the radiator where it must surrender it's Btu's to the surrounding radiator. The hot radiator warms the nearby room air and convection moves the warm air around the room to heat the space. As the steam loses thermal energy it condenses and the cooler condensate is allowed to pass out of the radiator and into the return piping system to be re-used by the boiler to make steam again.

Mount Holyoke burned 940,000 thousand gallons (1.28 x 10^{11} btu's) of #6 Oil last year, generating steam for heat and hot water.

This would heat more than 1500 homes for a year.