

Energy Guidelines

RESPONSIBILITIES

- Every person is expected to be an “energy saver” as well as an “energy consumer.”
- Faculty and staff members are responsible for implementing the guidelines during the time within their classrooms and respective offices.
- The custodian/cleaners are responsible for control of common areas, i.e. halls, cafeteria, etc.
- Since the custodian/house cleaners are typically the last persons to leave a building in the evening, they are responsible for verification of the nighttime shutdown.
- Selected campus building administrators are responsible for the total energy usage of their buildings.
- The Energy Educator/Managers perform routine audits of all facilities and communicate the audit results to appropriate personnel.
- The Energy Educator/Managers are responsible for suggesting adjustments to the campus Energy Management System (EMS), including temperature settings and run times for HVAC and other controlled equipment.
- The Energy Educator/Managers provide regular reports to building administrators indicating energy savings performance.
- Physical Plant Services is committed to and responsible for maintenance of the learning environment.
- **To promote a safe, healthy learning environment and to complement the energy management program, each campus shall review and adhere to the preventive maintenance and monitoring plan administered by the campus physical plant for its facilities and systems, including HVAC, building envelope, and moisture management.**

GENERAL

1. Classroom doors shall remain **closed** when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. between hallways and gym or pool area).
2. Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the campus's buildings to ensure compliance with these guidelines.
3. Non-critical or non-essential exhaust fans should be turned **off** every day and during unoccupied hours.

4. All office machines (copy machines, laminating equipment, etc.) shall be switched **off** each night and during unoccupied times. Fax machines should remain on.
5. All computers should be turned **off** each night. This includes the monitor, local printer, and speakers. Network or sensitive equipment is excluded.
6. All capable PC's should be programmed for the "energy saver" mode using *the power management* feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10-minutes of inactivity.

AIR CONDITIONING EQUIPMENT

1. Occupied temperature settings shall *NOT be set below 74°F* unless that area is identified as a critical environment that requires cooling below 74°F.
2. The unoccupied time shall begin when the students, faculty or staff leave an area.
3. During unoccupied times, the air conditioning equipment shall be **off**. It is anticipated that the temperature of the classroom will be maintained long enough to afford comfort for the period faculty remains in the classroom after the students have left.
4. Air conditioning start times may be adjusted (depending on weather) to ensure student and faculty comfort when classes begin.
5. Ensure outside air dampers are closed during unoccupied times.
6. Ceiling fans should be operated in all areas that have them.
7. Relative humidity levels shall not exceed 60% for any 24 hour period.
8. Air conditioning should not be utilized in classrooms during the summer sessions unless the classrooms are being used for instruction or extracurricular activities. Air conditioning may be used by exception only or in those campus buildings that are involved in team-cleaning.
9. In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned classrooms or dining areas should be kept closed as much as possible.
10. Ensure dry food storage areas are maintained within code requirements. Typically, this is 55°F-75°F temperature and 35%-60% Relative Humidity. Utilize loggers to verify.

Cooling Season Occupied Set Points¹: 74°F – 78°F

Unoccupied Set Point: 85°F

Heating Season Occupied Set Points¹: 68°F – 72°F

Unoccupied Set Point: 55°F

¹ Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

HEATING EQUIPMENT

1. Occupied temperature settings shall NOT be above 72°F unless it is a critically controlled environment.
2. The unoccupied time shall begin when the students, faculty or staff leave an area.
3. The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather (With exception to some labs, animal areas...).
4. During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times unless required to maintain a sensitive environment. Hot water heating systems should be switched off using the appropriate loop pumps.
5. Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
6. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
7. In applicable areas with heat pumps, ensure a 6°F dead-band between heating and cooling modes.
8. Heating oil and propane (if applicable) levels should be physically measured and recorded by “sticking the fuel tanks” or recording readings from propane tanks at least on the following intervals:
 - 1) recurring scheduled monthly date
 - 2) immediately before new delivery,
 - 3) immediately after delivery.

LIGHTING

1. All unnecessary lighting in unoccupied areas will be turned off. Faculty and students should make certain that lights are turned off when leaving an empty classroom. Utilize natural lighting where appropriate. “Lights off in unoccupied areas” is the theme to spread around campus.
2. All outside lighting shall be off during daylight hours unless required for a university sponsored event.
3. Gym lights should not be left on unless the gym is being utilized.
4. All lights will be turned off when students, faculty, and staff leave the area. Custodians will turn on lights only in the areas in which they are working.
5. Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.

WATER

1. Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately. If possible, grounds watering should only be done between 4am-10am.
2. Try not to water during the heat of the day, typically between 10am – 8pm.
3. When spray irrigating, ensure the water does not directly hit the building.
4. If possible, ensure water sub-meters are installed on irrigation and cooling tower supply lines to eliminate sewer charges.

Disclaimer: The University System shall adopt, observe and implement these guidelines as provided. However, these guidelines are not intended to be all-inclusive, and they may be modified for local conditions. These guidelines supersede all previous instructions related to energy conservation or building management.