
LAGRANGE COLLEGE BUILDING SCHEDULING AND TEMPERATURE SET POINT POLICY

CONTEXT

- LaGrange College seeks to maintain buildings that are comfortable for learning, working and living.
- As a signatory to the American College and University Presidents' Climate Commitment, LaGrange College is committed to reducing campus greenhouse gas emissions, approximately 80% of which are the result of energy use in buildings.
- Energy costs are a significant, controllable expense at LaGrange College. The College spends approximately nearly \$1 million per year on energy.
- The majority of this energy use goes towards cooling and heating building space (approximately 55%).
- Standardizing temperatures across campus could lead to the following financial and environmental savings:

| Temperature Standardization | Est. Annual Natural Gas \$ Savings | Est. Annual Electricity \$ Savings | Approx. Annual Total \$ Savings | Est. Annual Greenhouse Gas Emissions Reduction (metric tons CO ₂ e) |
|---|------------------------------------|------------------------------------|---------------------------------|--|
| Summer Current Avg: 68F Summer Standardized: 70F | \$ 14,329 | \$ 10,632 | \$ 25,000 | 236 (~3%) |
| Winter Current Avg: 75F Winter Standardized: 73F | | | | |
| Summer Current Avg: 68F Summer Standardized: 72F | \$ 27,312 | \$ 19,684 | \$ 47,000 | 448 (~5%) |
| Winter Current Avg: 75F Winter Standardized: 71F | | | | |
| Summer Current Avg: 68F Summer Standardized: 74F | \$ 44,214 | \$ 28,387 | \$ 73,000 | 671 (~8%) |
| Winter Current Avg: 75F Winter Standardized: 68F | | | | |

PURPOSE

17 The purpose of this policy is to set clear and consistent standards for LaGrange College’s building
 18 schedules and temperature set points in order to optimize occupant comfort and reduce energy
 19 waste.

20 **POLICY**

21 This policy applies to all LaGrange College campus buildings.

22 **BUILDING SCHEDULES**

23 Times in the below schedule that are marked as “Occupied” means that temperatures will be
 24 maintained at Occupied set points.

25 During summer, occupied times will begin one (1) hour earlier on Monday mornings.

26 Summer schedules will begin the day after Commencement. Summer will end between August 10
 27 and 15, depending on the school calendar. Building occupants should use the Monthly Building
 28 Scheduling Meeting to make specific adjustments to the start of summer scheduling.

29 Occupied times for campus buildings shall be as follows:

30

| | Summer | Fall and Spring | Fall/Spring Weekends | Holidays |
|-----------------------------------|-------------------------------|-----------------------------------|---|-----------------|
| Manget | 6a - 10a | 6a - 5p | Unoccupied Mode | Unoccupied Mode |
| Marriott | Occupied Mode | Occupied Mode | Unoccupied Mode | Unoccupied Mode |
| Lewis Library | 6a - 8p | 6a - 10p (Close at 5pm on Friday) | 11am to 4pm Saturday 2pm – 10pm Sunday | Unoccupied Mode |
| Chapel | Unoccupied Mode with override | Unoccupied Mode with override | Unoccupied Mode | Unoccupied Mode |
| Callaway Science | 6a - 3p | 6a - 8p | Unoccupied Mode | Unoccupied Mode |
| Callaway Academic Building | 6a - 10a | 6a - 5p | Unoccupied Mode | Unoccupied Mode |
| Quillian | 8a - 5p | 8a - 5p | Unoccupied Mode | Unoccupied Mode |
| Hawkes Hall Education | 6a - 5pm | 8a - 7p | Unoccupied Mode | Unoccupied Mode |
| Hawkes Hall | Unoccupied Mode | Occupied Mode | Occupied Mode | Unoccupied Mode |
| Pitts Residential | Unoccupied Mode | Occupied Mode | Occupied Mode | Unoccupied Mode |

| | | | | |
|--|---------------------------------|--------------------------|---------------------------------|-----------------|
| Smith Hall Offices | 6a - 5p with overrides | 6a - 5p with override | Unoccupied Mode | Unoccupied Mode |
| Smith Hall | 6a - 5p with overrides | 6a - 8p with override | Unoccupied Mode | Unoccupied Mode |
| Candler Cottage | 8a - 5p | 8a - 5p | Unoccupied Mode | Unoccupied Mode |
| Boatwright Hall | Unoccupied Mode | Occupied Mode | Occupied Mode | Unoccupied Mode |
| Turner Hall Assembly room | Unoccupied Mode (with override) | 6a - 10p (with override) | Unoccupied Mode (with override) | Unoccupied Mode |
| Turner Hall Dorm | Unoccupied Mode | Occupied Mode | Occupied Mode | Unoccupied Mode |
| Turner Hall | Unoccupied Mode (with override) | 6a - 10p (with override) | Unoccupied Mode (with override) | Unoccupied Mode |
| Henry Dorm | Unoccupied Mode | Occupied Mode | Occupied Mode | Unoccupied Mode |
| Candler Dorm | Unoccupied Mode | Occupied Mode | Occupied Mode | Unoccupied Mode |
| Hawkins Dorm | Unoccupied Mode | Occupied Mode | Occupied Mode | Unoccupied Mode |
| Alumni House | Unoccupied Mode | Unoccupied Mode | Unoccupied Mode | Unoccupied Mode |
| Price Theater | 6a - 11a | 8a - 10p | Unoccupied Mode | Unoccupied Mode |
| Lamar Dodd Art Center Gallery¹ | Occupied Mode | Occupied mode | Occupied Mode | Occupied mode |
| Lamar Dodd Art Center Lecture | Unoccupied Mode | 8a - 5p | Unoccupied Mode | Unoccupied Mode |
| Lamar Dodd Art Center | Occupied Mode | Occupied Mode | Occupied Mode | Occupied Mode |
| Callaway Education Building | 6a - 5p | 6a - 8p | 6a - 12p | Unoccupied Mode |
| Callaway Education Building (Addition) | 6a - 5p | 6a - 10p | 6a - 6p | Unoccupied Mode |
| Natatorium | 6a - 5p | 6a - 5p | Unoccupied Mode | Unoccupied Mode |
| Auditorium | 6a - 10a | 6a - 5p | Unoccupied Mode | Unoccupied Mode |
| Banks Building | 6a - 5p | 6a - 5p | Unoccupied Mode | Unoccupied Mode |

¹ Schedule will be reevaluated after renovation in summer 2012.

32 “Override” is the capacity to temporarily set an Unoccupied space to Occupied Mode via the space
33 thermostat. When override is applied, the HVAC system will condition the space to Occupied
34 temperature set points for a limited span of time. Override can be applied as many times as desired
35 as long as an occupant is using the space.

36 EVENING COLLEGE AND GRADUATE EDUCATION COURSES

37 In order to minimize the heating and cooling of spaces with only a few occupants, Evening College
38 and Graduate Education courses will only be offered in Callaway Science Building, first floor of
39 Hawkes, Smith Hall and Lewis Library. Selected other courses will be offered on the Callaway
40 Campus as required, subject to approval of the Provost.

41 MONTHLY BUILDING SCHEDULING MEETING

42 The last Monday of each month, a meeting will be held to review building controls schedules with
43 representatives from Alumni and Community Relations, Special Events, Physical Plant, Registrar,
44 Athletics, Music, Art, and Theater.²

45 TEMPERATURE POLICY

46 The American Society of Heating and Refrigeration Engineers (ASHRAE) publishes guidelines on
47 optimal space temperatures for human comfort (Standard 55 - Thermal Environmental Conditions
48 for Human Occupancy). ASHRAE’s guidelines are as follows:

| | |
|-----------|-----------|
| Summer | Winter |
| 74 – 79 F | 69 – 74 F |

49

50 Using the experience of LaGrange College personnel and ASHRAE Standard 55, optimal campus
51 building temperatures were developed. The temperature set points for all spaces shall be:

| | COOL | HEAT |
|------------|---------------------------------------|------|
| Occupied | Classroom – 74F Other spaces – 75F | 68 F |
| Unoccupied | 85 F | 55 F |

52 Additionally relative humidity shall be maintained below 60% per U.S. Environmental Protection
53 Agency recommendations.³

54 **Separate standards will be set for spaces where the above temperatures and humidity levels**
55 **may lead to damage to materials or equipment.**

² Participant suggestions: Alumni and Community Relations (Martha Pirkle), Special Events (Tammy Rogers), Physical Plant (Michael Coniglio), Registrar (Jimmy Herring), Athletics (John Hughes), Music(Ann Sellman), Art (Dawn Briggs), Theater (Lori Knopp)

³ <http://www.epa.gov/iedmold1/prevention.html>

56 Building occupants should expect temperatures to naturally drift to a few degrees above and below
57 (+/- 2 F) these set point temperatures due to system cycling and equipment calibration.

58 If there are physical problems with a space that are causing thermal discomfort, please notify
59 LaGrange College Physical Plant staff so they can take appropriate action.

60

SPACE HEATERS

61 Supplemental space heaters shall not be used between May 31 and October 1. Due to City of
62 LaGrange electric rate structures, running a space heater during these summer months can incur
63 significant demand charges over a full calendar year.

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EFFECTIVE DATE

65 This policy will become effective April 11, 2012.