MechSE WELLness L01 Light Exposure and Education

Intent: Provide access to indoor light exposure and light education.

Mammals function on an approximately 24-hour cycle, following what are referred to as circadian rhythms. Light is the main driver of the circadian system, which controls body processes such as digestion, the release of certain hormones, body temperature, and sleep. The increase of electric lighting has led to indoor environments relying on electric light over daylight. However, reduced exposure to light has been linked to the onset of depression and impairment of cognitive function in individuals. Irregular sleep schedules have been linked to poorer academic performance in college students. Our goal is to improve academic performance for a lifetime.

Impact: Indoor access to daylight positively influences productivity and mood while maintaining natural circadian rhythms.

What are the requirements to earn this credit?

- 1. Ensure daylight in as many spaces as possible, with 30% of all workstations within 20 feet of windows.
- 2. Promote lighting education via educational signage placed around the facility and provide resources to occupants regards circadian rhythm, sleep hygiene, age-related increase in light requirements, and importance of daylight exposure to circadian and mental health.

How is MechSE accomplishing these requirements?

Perhaps you remember MEB's dark and stark hallways. Every effort was made during design to provide daylight access to as many spaces as possible, including the hallways via windows in the doors. The Graduate Programs Office and Undergraduate Programs Office entries were converted to full window fronts to allow as much light as possible from those offices to spill into the corridor. All the classrooms in the new addition borrow light from the study spaces outside them and the renovated classrooms' windows were upgraded. Even our new courtyard labs receive early morning daylight and our conference and classroom above borrow that daylight. Almost every space has access to a window and daylight now!



