SUSTAINABILITY PROPOSAL Cheek 102 led lighting

SUBMITTED BY: Anna Pellegrini

SUBMITTED ON: 04/07/2021



I. Identification of Sponsors

- a. Project Sponsors (insert project sponsors and contact information below)
 - 1. Anna Pellegrini

415 East Bear Blvd – B102 Springfield, MO 65806 708-915-0672 Ap0415@live.missouristate.edu

- **b.** Faculty/Staff advisor (insert faculty/staff contact information below)
 - Dr. Michele Smith
 Dean of Students and SGA Advisor
 901 South National Avenue
 Springfield, MO 65897
 (417) 836-5527
 MDSmith@missouristate.edu
- **c. Project Manager** (identify manager below, should also be a project sponsor)
 - 1. Anna Pellegrini

II. Description of Proposed Project

- a. General Description of Proposal: Student Government Association allocating funds from the sustainability fund to replace the lights in Cheek Hall room 102 with energy efficient LED technology.
- b. Proposal Details: The lighting in Cheek 102 was last upgraded in the 1990. Replacing these lights with LED technology will save 40% on energy use for lighting along with creating better lighting within the classroom. The proposed lighting will be motion sensor, turning on the lights when someone enters the room and be programmed to turn off after a delay of inoccupation.

- c. Proposed location for the object of the proposal: Cheek Hall room 102
- **d.** Alternative Uses: Replacing these lights would reduce maintenance needs as LED lighting has over a 25-year life expectancy.
- e. Drawbacks: A drawback is installing these lights means the classroom cannot be in use when they are being replaced, however the replacement would occur over the summer when there is less traffic through that classroom.
- **III. Necessary modifications to existing structures** Ceiling modification to install the fixtures and replace the lights.

IV. Estimated Cost of the Project \$28,050.00

- a. Provisions of Alternatives in Order of Preference: If funding is not available, the project can be carried over to the following semester or year until funding is available.
- b. Provisions of Complete Cost Breakdowns

Lighting fixtures, controls, wiring, installation etc.: \$19,000

Ceiling modifications, furniture removal, and reinstallation to accommodate scaffolding: \$5,500

Classroom technology interface: \$1,000

10% contingency: \$2,550

- c. Provisions of any Ongoing Costs Current lighting associated cost approximately \$841 per year which is covered by the university, with these proposed LED lights it would only cost \$288, saving the university about \$553 per year.
- V. Estimated Completion Time of Project: Should this project be approved, a Project Request Form will need to be submitted to Planning, Design & Construction in

accordance with their policies and procedures. The Project Request Form must include the funding sources, as well as the signatures of the budget approvers for the identified budgets.

Once the approved Project Request Form is assigned to Facilities Management and received, we will work to order the fixtures and begin planning the installation sequence. Ideally, the installation would occur during the summer months when the facility has less traffic. This will allow the work to be completed with less disruption of the daily activities that take place in the building.

Based on equipment lead times and contractor availability, we expect installation to take place over the summer months, so the classroom is ready for use at the start of the Fall 2021 semester. The classroom is already scheduled to be out of service for the summer of 2021 to allow for repairs to the HVAC system so this provides a good opportunity to also upgrade the lighting and controls.

VI.

- VII. Estimated Life of Project: 25 years
- VIII. Justification of Project: LED lighting will save about 40% of our energy use for lighting allowing the university to be more sustainable. These lights will improve classroom lighting for a better-quality classroom environment. It will reduce maintenance in the future.
- IX. University Support (if applicable) (Signed letter(s), or email(s), of support from appropriate university member(s), as necessary. The letter(s) of support should detail any ongoing commitments, maintenance, support, or costs associated with the proposal that will be assumed by the University.)