

Student Name:

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Project Assignment 3 – Commercial Lighting Project



Objective: To allow students to apply lighting solutions that promote the understanding of human-centered design, health and well-being, environmental responsibility, electrical systems, and systems thinking through creative and pragmatic applications to color and light within a commercial setting.

Part 1: Reflective Ceiling Plan

Students must submit a completed Reflective Ceiling Plan integrated into a Commercial Project.

1. _____/10 pts. Utilizing the proper symbol, students will note the various Ceiling Heights of all scope of work areas along with appropriately identifying a change in ceiling heights.
2. _____/20 pts. Students are to properly indicate/draw the location of all Items that touch the ceiling. This would include Walls, soffits, light troughs, Light Fixtures, Skylights, Green Ceilings, Mechanical, Electrical, and Plumbing devices, or equipment.
3. _____/30 pts. Students are to Space Plan a commercial space utilizing a combination of (5) lighting applications (General Lighting, Task Lighting, Accent Lighting, Daylighting, and Decorative Lighting). Students are too closely considering the various lighting applications for enhancing the spatial environment of the assigned commercial space.
4. _____/10 pts. Students must properly indicate all ceiling sections, elevations, and details utilizing industry symbols and notation.
5. _____/10 pts. Students must call out a minimum of (3) ceiling details and properly detail them separately, as noted in **Part 2** of this Assignment.
6. _____/10 pts. Students are to Illustrate a Lighting Legend and schedule properly.
7. _____/10 pts. Students are to create an aesthetically pleasing design.

Total _____/100pts

Part 2: Lighting Detailing

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With the Instructor, the students are to choose a minimum of (3) areas of their commercial space to create (3) different types of ceiling details. Note that details can vary from soffits to skylights to creative architectural ceiling applications but must contain some lighting application. Requirements are listed below.

Each detail will consist of the following applications:

- ____/ 20 pts. Enlarged Partial RCP at 3" = 1'- 0" with Graphic scale for PowerPoint of each area they have chosen.
- ____/ 50 pts. A minimum of (1) Enlarged section at 3" =1"-0" for each of the (3) required details with graphic scale for PowerPoint. Students are to utilize the Interior Graphic Standards book for referencing how details are identified.
- ____/30 pts. Be sure to include dimensions and callouts of materials and finishes for RCP and Detailed Section.

Total ____/100pts

Part 3: Solar Geometry

For the assigned commercial projects, students are to create an active solar geometry that shows the transition from daylighting during the daytime to purely electric lighting during evening hours.

- ____/10 pts. Solar Geometry must be unique to your commercial Project Location.
- ____/20 pts. Solar Geometry must extend for a minimum of 12 hours.
- ____/20 pts Solar Geometry must show an active transition from the use of daylighting to electric lighting.
- Total ____/50 pts

Part 4: Final Project Presentation

Students are to aesthetically integrate the lighting applications noted in **Part 1** and **Part 2**, and **Part 3** of this Assignment into the assigned commercial project.

Total ____/250 pts.