

INTERDISCIPLINARY PROJECT LAB

IDEA292 | Fall 2026

T/R 9:50a-11:40a | IDEAS Lab

Project 1 Paper Lampshade

Assigned: Tuesday, September 8

Due Dates:

Precedence Study: Thursday, September 10

Digital Prototype: Thursday, September 17

Project Prototype: Thursday, September 24

Project Final: Thursday, October 1

Design and construct a paper shade for a wall-mounted light fixture. You are making a full-scale vessel for light to occupy. This design problem is intended to investigate the relationship between form and material – in this case paper – and to study the potential of one proportional system. This problem emphasizes the importance of making in the process of design and of direct experimentation as the basis of study. Thinking it out will not take you very far.

- Physical manipulation of different kinds of paper and observation of varying effects of light are the most effective ways to develop your solution.
- The shade is to be made of one type of white paper and one type of glue (if necessary).
- No other material is permitted.
- The shade must be self-supporting – no wooden or wire frame, etc.
- The shade must be designed to project well beyond a 40W bulb/LED equivalent which will project directly from a vertical surface, and it must be sufficiently rigid.
- The shade may be no more than 2 feet wide at its widest point but may be any height. (The socket will be positioned between 5 and 6 feet above the floor.)

As a side note: You may wish to design the shade using the proportional system of the Golden Mean. This is a ratio of 1:1.618 or $A:B = B:A+B$. This could apply to areas of surface, lengths of edge, etc. The backboard is a golden rectangle.

The supplied backboard with light socket, LED bulb and three mounting hooks will be provided to you for your design's display. You may not modify the board in any way, change placement of the mounting hooks or change LED bulbs. Any mounting requirements for the shade must be provided for by the shade assembly itself.

You should bring your project studies/prototypes to all class meetings for interim review.

Get started on it soon! You'll need the time.