

Three-Dimensional Design

Assignment 3

Due Date: Sunday, October 5, 11:59 pm on Blackboard

Preliminary sketches and ideas due in Tape Dispenser Discussion Forum: Thursday, 9/25, 11:59 pm

Comments on ideas, sketches, and models due on 9/28 by 11:59 pm

Critique Comments due in Tape Dispenser Discussion Forum: Wednesday, 10/8, 11:59 pm

Materials: To be proposed by student

ASSIGNMENT: Functional Tape Dispenser

Each student will design and build a hand-made tape dispenser. It must be functional. The materials to be used are up to the student. Each student must propose the material(s) in the Discussion Forum so the student, the instructor, and other students can discuss it and strategize.

Preliminary work: Multiple design ideas on paper for tape dispensers, including ideas about materials to be used. If the student wishes to make a simple mockup of the proposal, that would be welcome.

The goal is to make a completely functional tape dispenser that is different from the typical tape dispenser. Creative problem solving is required. Whether the design is representational (i.e. animal, sun, mountains) or abstract is up to the student.

Requirements: The tape must roll. The roll of tape must be able to be replaced. The cutter must cut. The tape dispenser must stay on the table when the tape is pulled if it is a table-top dispenser. If it is a hand-held dispenser, it should not be awkward or uncomfortable to hold it.

Problems may arise: roll of tape does not spin freely or falls off; the tape gets stuck or has to travel too far to the cutter; the cutter does not work easily; the tape dispenser is too light to stay still when the tape is pulled (or awkward to hold).

Note: This is one project that sometimes requires students to go to a hardware store for materials, though hopefully, they will not be costly.

Note: This will require a video for final submission. Hopefully, you can enlist the help of another person to either model using the tape dispenser or film you while you demonstrate it. **Video evidence of changing the tape roll and cutting the tape is required.** If no video is submitted, I will have to grade the tape dispenser as though it does not function.

Note: I have found that in many cases, if the cutter is at an angle, it can cut the tape more easily.

Cutting implements that have worked in the past (some are a little scary, so please be careful): razor blades, row of nails, sharp shell, sharp stone, a piece of the cutter from plastic wrap, keys, sharp wood,

Assessment: 8 points (+2 points for the online critique)

| Criteria | Needs Improvement | Competent | Proficient |
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| Planning | The Tape Dispenser was not carefully planned. There were no preliminary drawings shared with the instructor or classmates before starting the project. 0 | There were some preparatory drawings made, but not enough to be prepared to make the tape dispenser. 1 | Sufficient preliminary drawings were made to allow the artist to create a tape dispenser with appropriate proportion and functionality. 2 |

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| Exploration of Materials | There was little to no experimentation with the chosen material. 0 | Some experimentation, but not enough to fully effect the final production of the tape dispenser. 1 | There was significant experimentation of the chosen material, which led to a successful and functional tape dispenser 2 |
| Creative Solutions Roll is replaceable Dispenser doesn't move | There was little to no problem solving used to create the tape dispenser. 0 | Though there was some problem solving, problems remain that could have been worked through. Either the tape dispenser moves when pulling the tape, is awkward to hold, or the roll of tape is difficult to change. 1 | Each problem that arose was solved with thought, experimentation, and discussion. The tape dispenser is easy to hold in the hand or does not move from the table when the tape is pulled. The roll of tape is easily replaced. 2 |
| Functionality Tape rolls Cutter cuts | Two or more aspects of the tape dispenser don't work. 0 | At least two aspects of the dispenser work: tape rolls, doesn't fall off, the cutter cuts easily. 1 | All aspects of the dispenser function properly, without a hitch. The tape rolls and does not fall off. The cutter cuts. 2 |
| Participation in the Critique Discussion Forum on Blackboard | There was no participation in the Tape Dispenser Discussion Forum. 0 | There were comments made in the Discussion Forum, but they lacked detail, specificity, or substance. OR there were fewer than four comments during the planning stage and/or fewer than four comments during the critique stage. 1 | There was ample constructive participation in the critique of others' work. This included a minimum of four comments on people's ideas and four comments in the final tape dispenser critique. These comments included references to materials, creativity, functionality, and problem solving, as well as aesthetic aspects of people's final dispensers. 2 |