

30 Final Specs

Wednesday, April 16, 2025 2:29 PM

Today

Scott Ehrlich Buckminster Fuller

yes
Clickers
Today

Final presentation, report and Expo specs.
Sketching transparent materials

Clicker:

How is your project going? (not your posts)

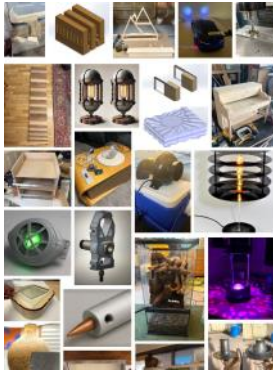
- 20% a) Great! Almost done
52% b) Pretty good, will be done on time (Wednesday)
24% c) OK, but won't be ready on time
4% d) Not great, still waiting for materials
e) Terrible, won't be presentable even for our expo.

How are your posts and comments going?

- 56% a) Great, all up to date
20% b) Good, mostly up to date on both
20% c) OK, missing one or two posts, good on comments
4% d) Meh, missing a bunch of posts and comments
20% e) Urk, I'm way behind



2024



EXPO 2025

See what students make when they can make anything they want

WEDNESDAY

May 7

01:30PM - 4 PM

IDEA FORGE, EAST END OF MIDDLEFORD

Don't worry! It's free and open to the public

Aesthetics in Design
MCEN/ATLS - 4/5279



Send it to your family and friends!



Final
Report Sp...

Main Project Final Documentation Specifications

Aesthetics of Design

Spring 2025

Due dates:

- In-person Pod presentation room request due April 19.
- Your product (artifact, or whatever you have created) must be



Expo requirements survey

Need Pod

Due dates:

- In-person Pod presentation room request due April 19.
- Your product (artifact, or whatever you have created) must be completed by noon Wednesday April 23
- You are encouraged to revise and improve them later, but this is the version you must document for critique. If you revise your creation, submit an additional post about it later too.
- Expo Requirements Survey due Monday April 28
- Two-Part Final Report.
 - Part 1 due on AesDes.org midnight Weds April 23.
 - 2 In-Depth Critiques (i.e. for two people) of Part 1 due as comments midnight Sunday April 27.
 - Part 2 due midnight Weds April 30.
- Ungrading Statement Weds May 7, 1:30 pm
- Exit Survey Weds May 7, 1:30 pm
- AesDes Expo in the Idea Forge Weds May 7, 1:30 pm – 4pm.
- Required Post 13: Portfolio, due Weds May 7, 1:30.
- Any final revisions or late work: Weds May 7, 1:30 pm.
Submissions after this time will require a grade change.

Need Pod
Facilitators

Details

Main Project Artifact

From the Initial Assignments document.

"You can make anything you want, as long as it has some sort of dynamic component; a moving part or something that changes with time. You are expected to pay for the materials (cost at least equivalent to a hardcopy textbook, say \$150) and the project is yours to keep at the end of the semester."

And of course, it must express some aesthetic that you choose and define. That's what this class is about, right? Your focus should be aesthetics first, function second. It's OK if your project doesn't work, but not OK if it looks bad.

Final Report/Blog post, Parts 1 and 2

Length: As long as it needs to be to include the following. This documents your efforts for two thirds of the semester. Don't scrimp. Each part minimum of 1500 words, plus 5 images or vids.

Your complete report will be due in two parts, as posts in consecutive weeks. Part 1 focuses on the 'what' and Part 2 focuses on the 'how'

- Don't forget to set a Featured Image for each part.
- OK to cut and paste from previous posts about your main project, but be sure to update the content and incorporate into a narrative of how your project developed. Don't forget to turn future tense into past tense throughout ('I will do XYZ' should become 'I did XY but couldn't do Z').

Part 1: What

- Describe and **cite** your inspirations and any existing designs that you adapted. *You must cite ALL content on your blogs for this course! Any photo that you did not take, any text that you did not write MUST have a citation, a source link. If you can't remember where you got something DON'T USE IT. Go back and search for something similar that you can cite.*
- Describe **your vision** for your project, the specifications that you developed for its function *and its form, your artistic vision and aesthetic*. What were you trying for?
- Include and describe **your initial sketches and final design plans**. Include your complete CAD drawings if you are using CAD in your design process. Include how your aesthetic was embodied in your design.

Part 2: How

- Create a **timeline graphic**. Show your actual design process. Be sure to show times for exploration, skill acquisition, looping, shopping, fabrication and documentation.
- Add a **detailed description of your actual fabrication process**. How did you make your artifact? What were the steps? Describe the steps shown in your timeline graphic. Document with lots of additional sketches, flowcharts, photos and/or video.
- Write a conclusion. **Compare where you started (plans) with where you ended**. What do you wish you had done differently? What will happen to your creation now? **Focus on the aesthetics**. Don't get too wrapped up in function.
- Optional: include a link to the video you made of your live presentation, or another video that provides an equivalent full description.

Final Report Presentations

In class starting Weds April 23 (see Schedule), we will have presentations in pods. The pods will be mixed and split in half to allow more time for presentation and critique from a fresh perspective. Critiques will use the same procedures as the rest of the semester.

Pod Facilitators are expected to coordinate Critique Facilitators, who presents which day, make sure the Google sheet links are posted in and take attendance, filling out the names in the Google Sheet. The schedule needs to be set before the first presentation on Weds April 23.

Each student will give a presentation on their project, with the content of the presentation to mirror the entire (Parts 1 and 2) written report, detailed above. Yes, Powerpoint is suggested. Plan to talk for 10 minutes, then take 10 minutes for Q&A, then one minute for the next speaker to get set up while others are commenting. Your presentation should capture your process for the final project, and can include the same content as in your written report. Remember, you are archiving your work. How you want to present it is up to you.

It's up to you to make sure you can share your screen in Zoom. If it doesn't work, be prepared to have a backup posted (in Slack?) to show on somebody else's laptop or speak without it. **Have your artifact available to show.** You don't want to watch somebody else's presentation without seeing what they actually made, right? As before, your group can choose to have an in-person meeting in addition to zoom. Your Pod Facilitator must request a room by April 19. Earlier is better; rooms may be hard to come by.

Say Thank You at the end of your talk. Do NOT say 'Any questions' right away; wait until after the applause or thumbs ups. Then ask for questions. It's magic. It completes the rhythm of the talk. Allowing applause sets the audience free to ask.

You may want to record a video of your talk and feedback. Ask the zoom room host to do that and share it with you. Afterwards, title your video, then upload to Youtube or Vimeo and put the link in your post Part 2.

Everyone is expected to comment on your podmates' presentations, live in class. **Even on the days you are not presenting, you must attend and comment.** This is another opportunity to hone your critique skills. If you cannot attend, be sure to comment anyways, and figure out some other way to contribute to the class.

Ungrading Statement Due Wednesday May 7, 1:30 pm

As I said at the start of the semester, everybody who has done all their weekly posts, required presentations, substantive comments, and made a good effort at all the other stuff will get an A. However, I have no way to really understand all the stresses you've been under and challenges you are facing, so we will also use a form of 'ungrading' (there is interesting research on this approach). I am hereby requesting you to enter in Canvas a short statement of what grade you believe you have earned and why, taking everything into account. This is the grade you will get, unless I see substantial evidence to the contrary in your work. This statement will be due at the start of our expo, Wednesday May 7, 1:30 pm

Expo Requirements Survey Due Wednesday April 28, 11:59 pm

[Fill out this Google survey.](#) Think about the aesthetics of how you want to display your artifact, and what information you want to convey. You must display a title for the artifact and your name at a minimum. Tables and black tablecloths will be provided. 3 fold posters as a backdrop are suggested but not required. Lighting for your artifact is recommended but we can't provide this so will you need power? Indicate your special display needs such as power, darkness, easel, or wall. Do you want a table, or is

your artifact going to stand on the floor? How much square footage do you need? How will you display the title etc.?

If you must attend remotely, you will be provided with telepresence: a laptop or projector showing the class zoom room where you can share your screen. Indicate this in the survey.

We will post a map showing your assigned space on Monday May 6.

Exit Survey Due Wednesday May 7, 1:30 pm

Check your email for a Qualtrics survey link starting Monday April 21. I very much value your thoughtful responses, and will use them to improve the class.

Post 13: Portfolio. Wednesday May 7, 1:30 pm

Use this final post as a portfolio landing page and speak about the work for this class. Include links to all of both your Upcycle project and your main project posts, either in your narrative or at the end of your post. Tell the story of your semester in this class. Highlight what you are proud of and acknowledge your challenges. Feel free to point to other online-published work of yours as well. Maybe include a link to this post in your CV.

Final Revisions due noon Weds May 7 1:30 pm.

Final Revisions: You can submit late edits, posts and comments until Weds May 7 1:30; please email Shrey and Aryan, so they know to update Canvas. You are welcome to keep working on your project, and revise/add to your posts accordingly, up to August 2025; you'll still have editing access. If you believe your extra work merits a change in grade, be sure to let me know.

AesDes Expo Wednesday May 7, 1:30 pm. Attendance required, In-person expected if at all possible.

Fully-remote students can participate via Zoom but it won't be as fun as in-person. If you must be remote, indicate this in the Expo Requirements Survey. Remote students will be in the class zoom room, and in-person participants will view and interact with zoomers via laptops and projectors in the Idea Forge at specified times.

In-person logistics:

Bring your artifact! We will use both our classroom and the Idea Forge Commons.

Pod members will be at their projects at specified times, and browse other projects when not showing theirs.

Pod showing work	Start time	End Time
Set up your display and enjoy snacks	1:30	2:00
Pods 1, 2, 3 and 4	2:00	2:30
5,6,7 and 8	2:30	3:00

9,10,11 and 12	3:00	3:30
Eat more and clean up	3:30	4:00

Please invite your family and friends to the Expo, to see your work and others'. Excellent snacks will be provided. Volunteers to set up/ clean up are most appreciated!

5.5 MATERIAL EXPRESSION



5.5.1 Glossy and Matt

A glossy versus matt appearance of an object is mainly suggested by two characteristics. First, a difference in contrast can be seen. Glossy objects have a bigger contrast, while matt objects largely lack highlights. Moreover, on a flat glossy surface a gradient from full colour towards white can be seen.

The second characteristic has to do with reflections and cast shadow. Reflections dominate on a glossy surface. These reflections always appear mainly in the colour of the glossy material. There is little or no cast shadow on a glossy surface. A matt material displays hardly any reflections, but mainly cast shadow.

In a drawing in which the product material is expressed, it will be effective to exaggerate these characteristics.

Here you see the different marker strategies between glossy and matt material expression.



These effects are tricky and time-consuming when drawing by hand. CAD renderings will be more efficient if material surface information is really needed. But here's how to do it if you want to include the basics in your hand sketches.

5.5.2 Transparency

Glass has several handy and distinguishing characteristics one can use to express it in a drawing. First of all, it is obviously transparent. In a drawing, this simply means that it is handy to draw something 'behind' it to show this transparency. In the step-by-step example, cast shadow is chosen for this reason. A rounded object such as a glass will also distort what is seen through it. This is called refraction.

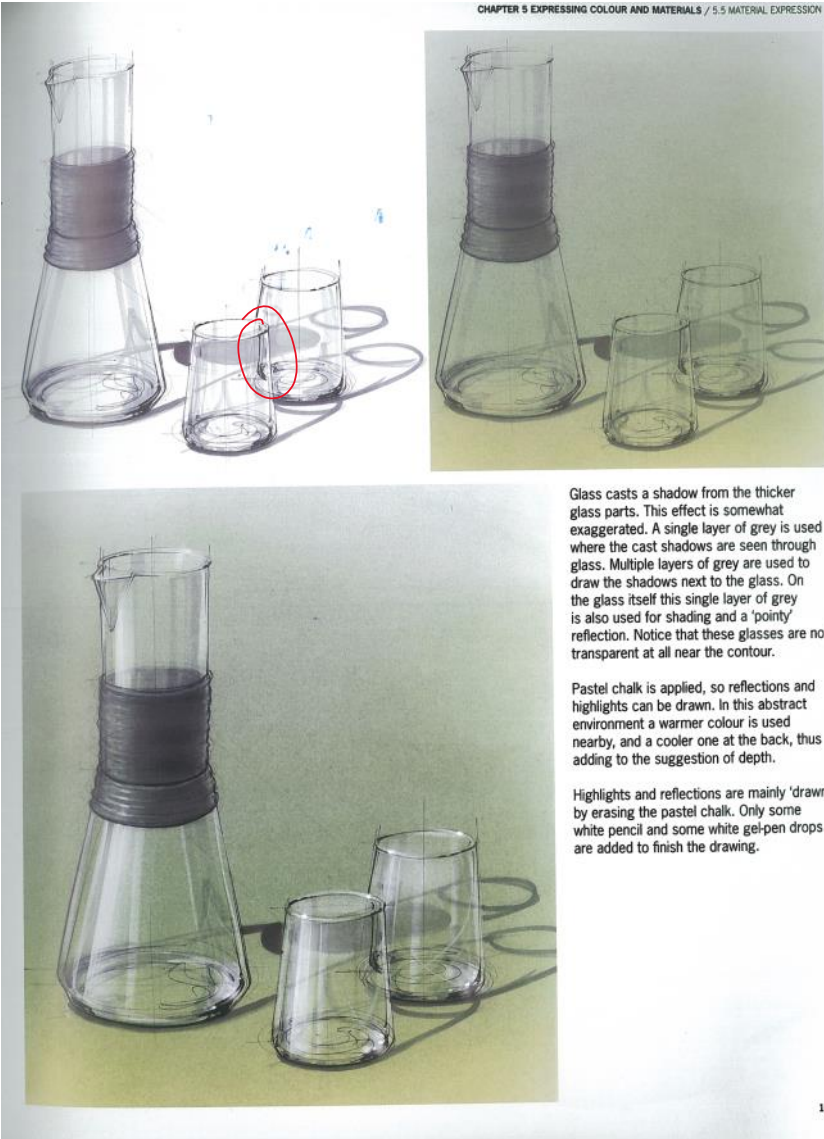
Another characteristic of glass is the compressed reflection seen in the material. You will find these reflections mostly where the material is thick. They appear mainly as black and whites.

Glass is also very shiny, which means using bright highlights in the drawing. These highlights can hardly be seen on a white background, as in the pictures. In a drawing it is effective to choose a darker background. Here it is done using pastel chalk.



First, a line drawing is made with black fineliner. It is possible to sketch very loosely, especially in positioning the base ellipses. Notice the number of lines used and their visibility in the end result.

The same fineliner is used to darken some contour lines, to express material thickness and to draw the black reflections in thicker glass areas.



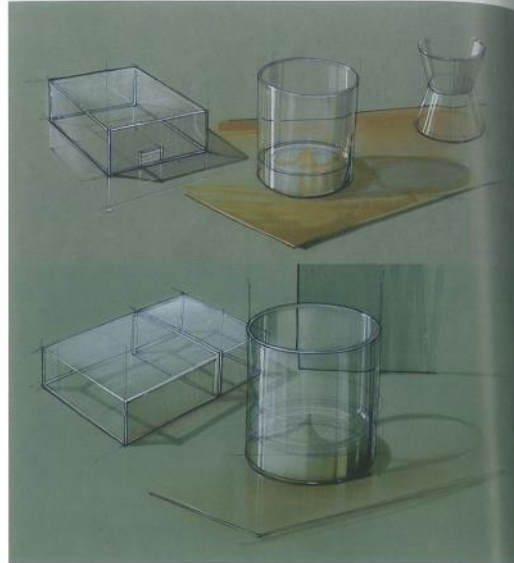
Glass casts a shadow from the thicker glass parts. This effect is somewhat exaggerated. A single layer of grey is used where the cast shadows are seen through glass. Multiple layers of grey are used to draw the shadows next to the glass. On the glass itself this single layer of grey is also used for shading and a 'pointy' reflection. Notice that these glasses are not transparent at all near the contour.

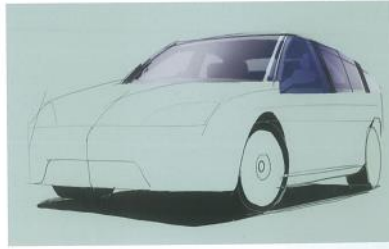
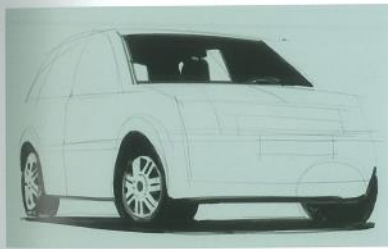
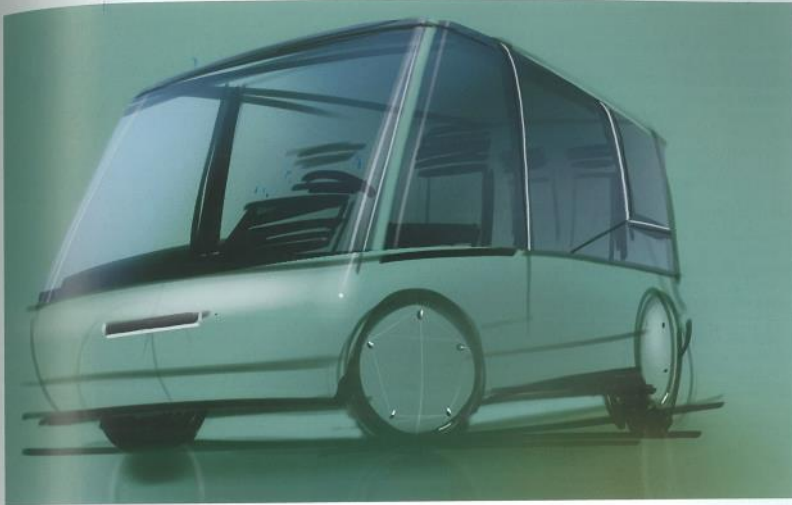
Pastel chalk is applied, so reflections and highlights can be drawn. In this abstract environment a warmer colour is used nearby, and a cooler one at the back, thus adding to the suggestion of depth.

Highlights and reflections are mainly 'drawn' by erasing the pastel chalk. Only some white pencil and some white gel-pen drops are added to finish the drawing.

When highlights are important, it is again obvious that drawing on coloured paper can be very efficient. Here, the use of white pastel chalk in the glass will make it stand out against its background.

Previously, transparency of glass was expressed by placing something behind it. In some cases, an object or something else is already at hand, such as in the example of the coffee grinder or the car windows. Sometimes, the transparency of the glass is overruled by bright reflections and highlights, especially on the more angled surface of the side windows. They prevent the material's transparency. In the cylindrical shapes, you most likely see this more to the side where there is more curvature.





In largely 'flat' surfaces like the car glass, transparency will be optimal when looking at it perpendicularly, and reflection/highlights will mostly be seen when looking at the glass from an angle.

First the car's interior is drawn in black only. After that, a large and brighter airbrush is used to partially cover this interior again. Some colour is given to the glass as well. Bright reflections are seen on the rounding in front, but also to the far left and right, further away from the viewer, as you are less perpendicular to these spots.

5.5.3 Metal

The representation of very glossy metal (chromium) theoretically consists solely of reflections of its environment. When the chromium surface is curved or rounded, these reflections are compressed, resulting in its typical 'stripy' appearance with high black and white contrasts. On a cylindrical object, these stripes are always in the longitudinal direction.

With photographs of chromium, the reflections are created in a studio setting that may differ greatly from reality. When drawing from nature, you are advised to simplify these reflections, like a studio setting, and use shading knowledge for spatiality. On an upright cylindrical shape, for example, use a dark reflection on one side and a high reflection on the other side, so as to add to the feeling of depth in the drawing.

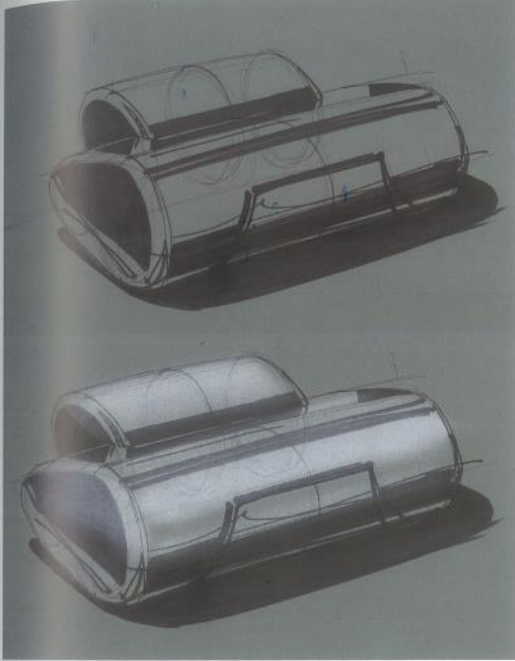


When you draw on white paper, the black-white contrast, and especially the highlights, will stand out better if you use coloured surroundings. These coloured surroundings can at the same time cause reflections in the material, which thus add to the effect.

The positioning of the reflections is most important. The compressed reflections are mainly visible on the outer sides of the cylindrical shapes.

Adding a little blue to the top side, and a little ochre to the base is called the earth-sky effect. It adds to the sense of depth in the object and a richer colour experience. It refers to a chromium object standing in the desert with only earth and sky reflected, as seen in this picture.





Curved and rounded metal may display unexpected reflections. In drawing, it is advised to simplify these reflections so that they will not visually dominate and cause a loss in depth of the object.

In the step-by-step drawing no surroundings to be reflected are at hand, so a theoretical one is drawn. The sky provides highlights, and imaginary surroundings cause dark reflections. These dark reflections start with a black marker.

White pastel chalk is then applied, covering almost the whole shape. On the spots of highlights, multiple layers of chalk are used.

Adding some blue and ochre for the earth-sky effect adds the only colour to the drawing.

Brushed or sandblasted metal loses in high contrast and reflections, so shading will become more important again. It is also important to pick the right 'colour' of cool grey.

