



Abertay
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A digital illustration of a fluffy, light-brown dog standing on a dark bank at night. The dog is looking down at its reflection in a pond. The reflection is a darker, more menacing-looking dog with glowing green eyes. The background is dark with some foliage and a full moon in the sky.

BA(Hons) Computer Arts

Digital Portfolio Submission Guidelines

Illustration by Katya Dix – Year 1



Welcome

Thank you for your interest in our **BA(Hons) Computer Arts** programme at Abertay University. As part of your application to the course, you are asked to compile and submit a digital portfolio of creative work.

This booklet hopes to guide you through the preparation of your e-portfolio, from the selection of pieces of work to include in your submission right through to the final submission process. The e-portfolio is your chance to showcase your creativity, ability and enthusiasm for the arts.

The following will cover:

- Advice on portfolio content
- Guidance on presentation
- Examples of portfolio content
- Technical guidelines

The information within this booklet will help you prepare your e-portfolio. We look forward to seeing your work and should you have any questions about the programme, the university or the e-portfolio itself, please do not hesitate to contact us. (contact details can be found on the last page of this document)

The Computer Arts Programme Team

The Course & E-Portfolio

The Computer Arts programme explores digital arts practice across the creative industries, including 2D and 3D digital art, animation, computer games, physical computing and visual effects.

As an applicant, you are invited to submit an e-portfolio to showcase your artistic and creative ability in the creation, construction and development of images. Within the e-portfolio you do not have to showcase computer art creation skills but should try to showcase your ability as an artist and your potential to develop into an accomplished digital media artist.

Within the e-portfolio, assessors are looking for:

- Evidence of an understanding of art and design principles and foundations.
- Evidence of curiosity, experimentation and exploration.
- Evidence of skills with traditional or digital tools and techniques.
- Evidence of awareness of artistic, and cultural contexts.

The inclusion of both traditional and digital arts practice is encouraged. Please note that digital practice is not a requirement for entry into the first year of the programme but can be included.

The Course & E-Portfolio

Continued

Inclusion of examples of life or observational drawing and painting are encouraged, along with evidence of imaginative arts practice.

Imaginative works can include any imagery you have created in the design and development of your own characters, worlds, stories or illustrations.

Within these works, assessors want to understand your creative process, from initial concept, through research and development to the final outcome, therefore each imaginative work within the e-portfolio should be presented as a one-sheet composition which demonstrates each of the stages of ideation.

Within your e-portfolio you should aim to showcase your passion, enthusiasm and creativity. We would like to see a range of your creative work and should you have examples which do not fall into the required content detailed within these guidelines, please consider including it within your submission to further showcase your creative potential and complement the required e-portfolio content.

For example, artistic and design practices such as photography, sculpture, printmaking, collage and graphic design are also welcome additions - all forms of creative practice can contribute to your e-portfolio.



Character Concept - Jule Hollstein - Year 2



E-Portfolio Suggested Content

Please ensure that your e-portfolio submission contains **10 pieces maximum**.

It should:

- Showcase only your best work.
- Highlight your artistic interests.

It may include:

- Examples of traditional media work, drawn from life, each of which will count as one of your 10 pieces.
- Examples of full creative process, through ideation, development, iteration and final work, in one sheet . Each composition sheet will count as one single piece. (see page 5, 6 & 7 for further guidance and example work)
- Examples of 3D work with both final render and, where possible, wireframe construction visible. If displaying both, combine them into a single image for entry as one single piece.
- Examples of motion work between 30 seconds and a minute in length. Each individual movie file will count as one single piece.
- Annotation to communicate process, creative decision making, intended function or to detail the length of time spent upon a single piece. Include this either as text annotation within the images themselves or as an additional text file that will not count towards your 10 pieces.

For direct entry to year two or three, the following must be included:

- Examples of 2D and/or 3D digital work.
- Creative process work highlighting development workflow and construction.



The next three pages cover what we mean by showing process.

Any piece where you have undertaken a creative developmental process will be good to share. We're looking for examples of your decision making skills and how you build in exploration and experimentation into your practice.

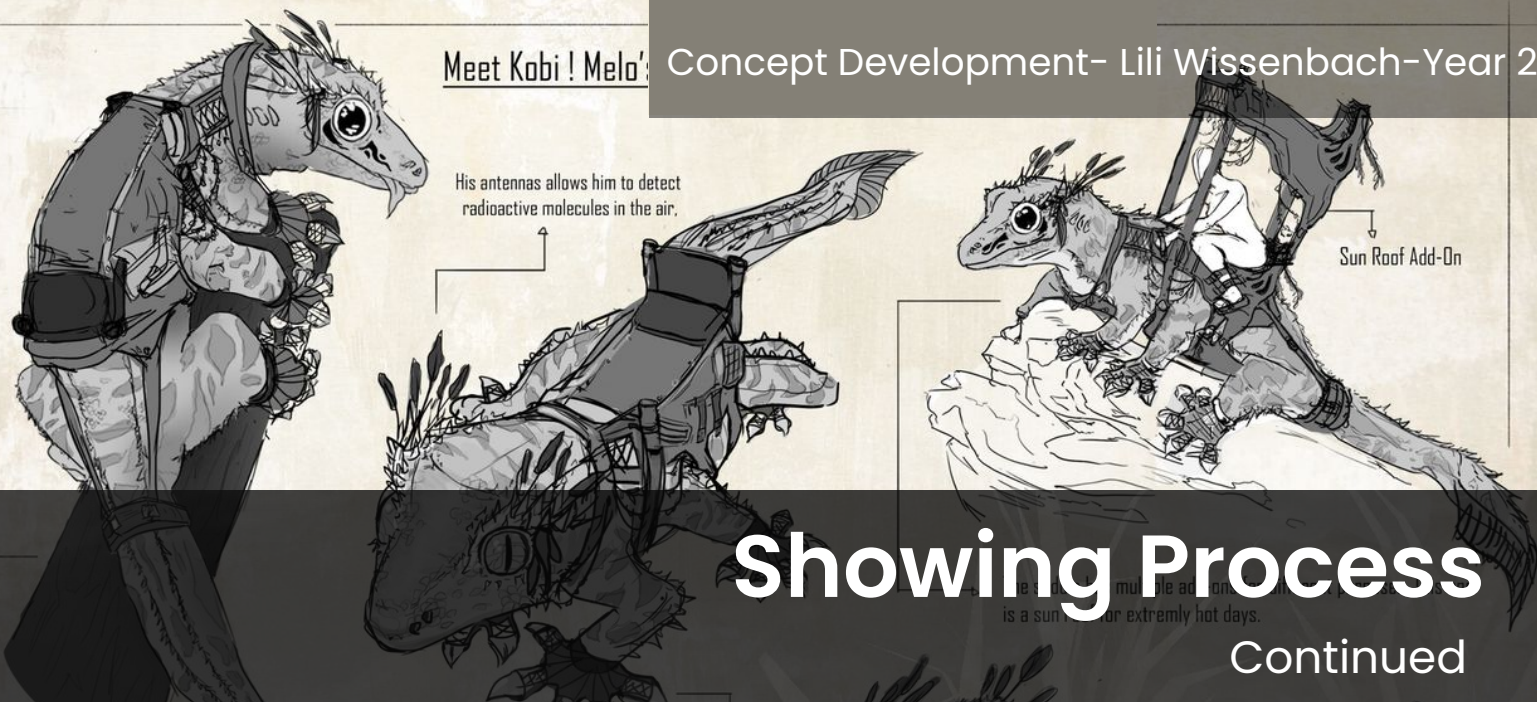
We suggest that you showcase this process within one image in a composition sheet. To do this, you can use an A2 size digital file and composite multiple images into this one sheet to demonstrate your research, your development process and the final work.

You may include headings to help mark different points in the process clearly. You may also provide short annotation to help provide context for your choices and actions.

On Pages 7-8 we have both a 3D and a 2D example page from students already at Abertay. These examples may help to guide you in the presentation of your own work.

For further information of how you can tailor your folio you can visit our Computer Arts E-Portfolio Guidance page here:

<https://www.abertay.ac.uk/courses/undergraduate/computer-arts-e-portfolio/>



Please note if applying for entry to year two or above:

If you are applying for advanced entry, i.e. to join the course into year two or year three, you should include images of your digital art, both 2D and 3D within your e- portfolio.

These digital art images should not only showcase your technical and software ability, but also your creativity and development processes.

Please compile the images into composition sheets (as detailed on page 7 and 8) and be sure to use annotation to describe your creative process where possible.

By looking at the examples of student work and the year they were created you will start to gain an understanding of the nature of artistic ability that will be asked within the Computer Arts programme, at different levels of study. Observing these examples may help to offer guidance on the kinds of content to include within your own portfolio, depending on the year of entry you are applying to.



research

I gathered images of warm, inviting and cosy library-themed interiors to use as reference for the architecture, assets, colours and atmosphere of my scene.

research

I highlighted certain design-features of the images I had collected that I particularly liked.



This arch looked like a great way of merging a wall and ceiling together.



I loved these book-piles as they have this effect that makes a scene feel less stiff, and they increase asymmetry, which would make the scene look more interesting.



There was something satisfying about the way these books were stacked, they look neat but still interesting.



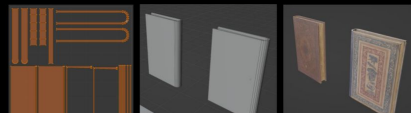
The way the books surround the chairs here creates a warm and inviting atmosphere.

book pile

After looking at the messy books in my research images, I decided to create a low poly 'Book Pile' asset that could be duplicated many times without bogging down my scene.



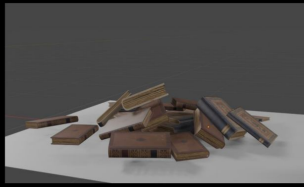
Book textures from textures.com



I created two simple, low poly book meshes, I unwrapped them, and used the 2 book textures.



I then duplicated and resized the books into the formation seen here. I applied rigid body physics to each, and matched collision boxes to the scale of each book.

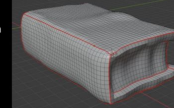
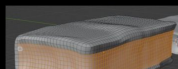
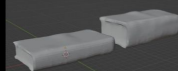
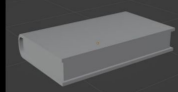


I then ran the simulation which resulted in the image above.

Final Model

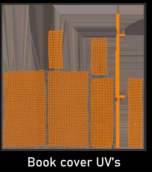
bookshelf books

I decided to make a more polished book asset for the bookshelves. I used the original low poly book from the Book Pile asset. I started by sculpting the mesh using Dynamic - topology. I gently sculpted the mesh to make it feel less sharp and geometric, and gave it a looser feel. Then, I remeshed the book to maintain quad faces and allow for smoother UVs. I also scaled the mesh on the Z axis as I wanted the book to be thicker.

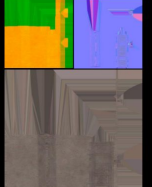


Final Model

I applied seams around the edges of the book, keeping in mind I'd have a separate texture for the pages. I then used Substance Painter to apply a leather material to the cover and I used an image texture from textures.com for the pages part. I then duplicated, rotated and scaled the book into rows of books. I made three different rows that would each sit on the bookshelves. I tried to vary them to make the layout seem more believable. I also decided to scale the book back down on the Z axis as I felt the rows of books worked better when thinner.



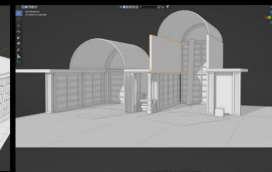
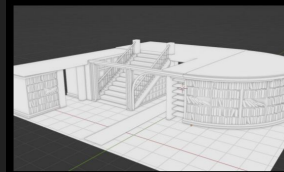
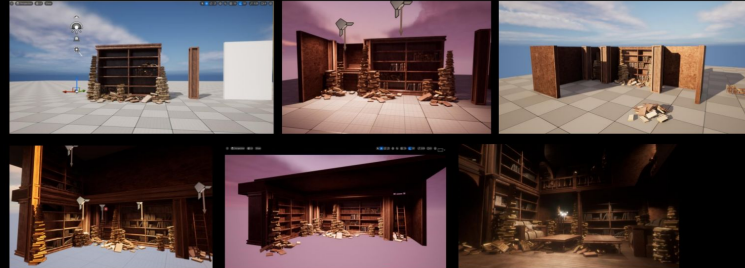
Book cover UV's



Book cover textures

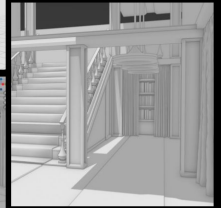
rendering process

When I exported my assets into UE5, I started experimenting with spot lights, and where they worked in my scene. I tried light from all the different times of day, but ultimately found that darkness complimented my scene most. The harsh contrast worked well with the dark wooden materials, and the whole scene felt more cosy and inviting. I also started experimenting with a post process volume, specifically with bloom, film grain and depth of field, to enhance the brightness, texture and depth of my scene.



unused block-outs

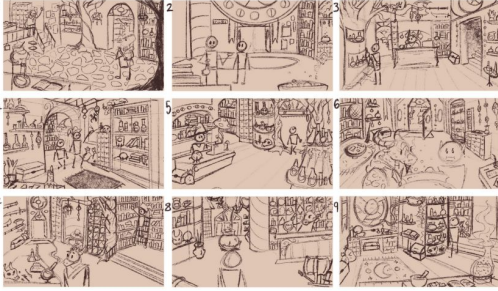
Here are some block-outs that didn't make the cut.



THUMBNAILS:

THUMBNAIL ANNOTATIONS:

1. Show an adventurer looking through the shop with an agr merchant. - Not too cluttered - really like the stone floor and the close trees. - Things within the shop are a bit all over the place!
2. Great on open composition, not very busy. - Not very much going on but the strongest.
3. Merchant behind the counter watching adventurer. - Like the variety in stock throughout this one, well mounted weapons I like - makes it look more like a general store than specifically potions.
4. Merchant showing adventurer around at the goods. Camera angle shows a lot of the store as well as the floor and the ceiling makes it look more open and inviting! - Really like this one.
5. Much more natural, using plants as furniture and sources of light. Much taller than other comps - good contrast in bay walls and the clean floor.
6. Up close comp making potions. - foreground characters aren't as same perspective as background! - Don't really like the urban to this one.
7. Foreground table and character - this area is separated by the less detailed floor which leads you up to the busy bookshelves and goods scattered throughout the shop. - quite a strong comp!
8. 3rd person view from the customer, set up almost like a video game encounter! Would have a bright glow emerging from the ceiling in the back that would become the focal point of the scene. - Isn't a good balance throughout, would need work if taking forward.
9. Only showing one character, the wizard/merchant. Really like the depth in this one, the environment has a good balance of busy against the less detailed mid section of the piece. - If worked properly with rule of thirds could work really well!



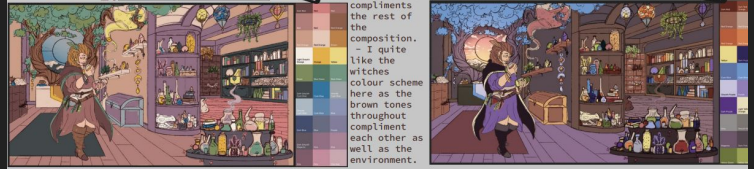
MOVING FORWARD!

Moving forward I'm going to take forward ideas 4, 5 and 9 into development. Taking parts from design and combining them into 1 stronger composition that I will use for my final design. - going into more detail with the items throughout the shop scene!

ENVIRONMENT DEVELOPMENT: COLOUR SCHEMES

Starting my colour experimentation, I took the colour pallets that I previously created and used them to make rough drafts of possible colour schemes to use in my final illustration.

1. In this experimentation I will also create rough drafts of the witch's colour scheme so that she compliments the environment.
2. -Using the colour pallet from this Moebius piece as I found the overall atmosphere to be warm and inviting - what I want to create in my work.
3. -While the use of natural tones in this composition create an inviting tone, the use of purples throughout the skirting, ceiling beams and centre shelf creates an unrealistic look that I don't think compliments the rest of the composition. - I quite like the witches colour scheme here as the brown tones throughout compliment each other as well as the environment.



INITIAL RESEARCH: FANTASY INTERIOR ENVIRONMENTS

Starting off my research I am looking through different styles interpretations of what an adventurer's supply shop would look like.

- Interesting visual structure of this place.
- Dark room lit with candles appears very ominous - glowing red demons emphasises this.
- I love the lighting in this piece. The time of day is past the sun going down so the general lighting is quite dim, the cauldron and the window add an atmospheric glow into the workshop. -The glow from the cauldron reflecting across all the glass bottles on the shelves. -I really like the varying shape and size across the different bottles.
- Swords are cool and so are the hanging lights.
- The decorative windows add a sense of mysticality against the plain concrete walls.
- I love the overall atmosphere in this one. The warm morning sun shining in through the windows, reflecting off every shiny surface and warm tones lighting up the scene creates a very cozy mood and shows off all the objects in the scene.
- The use of fungi for lighting is very clever here.
- Really like the composition here as there is a clear sense of depth. -Also like the use of the doorway looking out across the landscape.
- This piece is much more natural to its environment and furnishings as tree trunks appear to use the base of the entire interior.
- The use of fungi for lighting is very clever here.
- Really like the composition here as there is a clear sense of depth. -Also like the use of the doorway looking out across the landscape.
- I'm looking at other artists work, the designs that are strongly potion based stand out the most to me. I will take this forward into development when creating my own design. - Really drawn to the witch character.

FINAL DEVELOPMENT: SHADING DEVELOPMENT

- Starting colour scheme base that I created from slide 38
- Using my combination of cell and soft shading to add form and depth into the composition.
- Adding in the light sources from the windows and applying those reflections and highlights throughout the piece.
- Adding additional highlights and details throughout my illustration to really bring the whole piece together. Glowing effects to the hanging lights and potions really creates a magical atmosphere.

-FINAL ILLUSTRATION-



E-Portfolio Submission

When compiling your e-portfolio, please ensure:

- Each image is no larger than A2 in size (42.0 x 59.4cm or 2481 x 3548 pixels at 150dpi)
- Each image is saved as a .jpeg file.
- Each video is no more than 1 minute in length and saved as a .mov or .avi file.

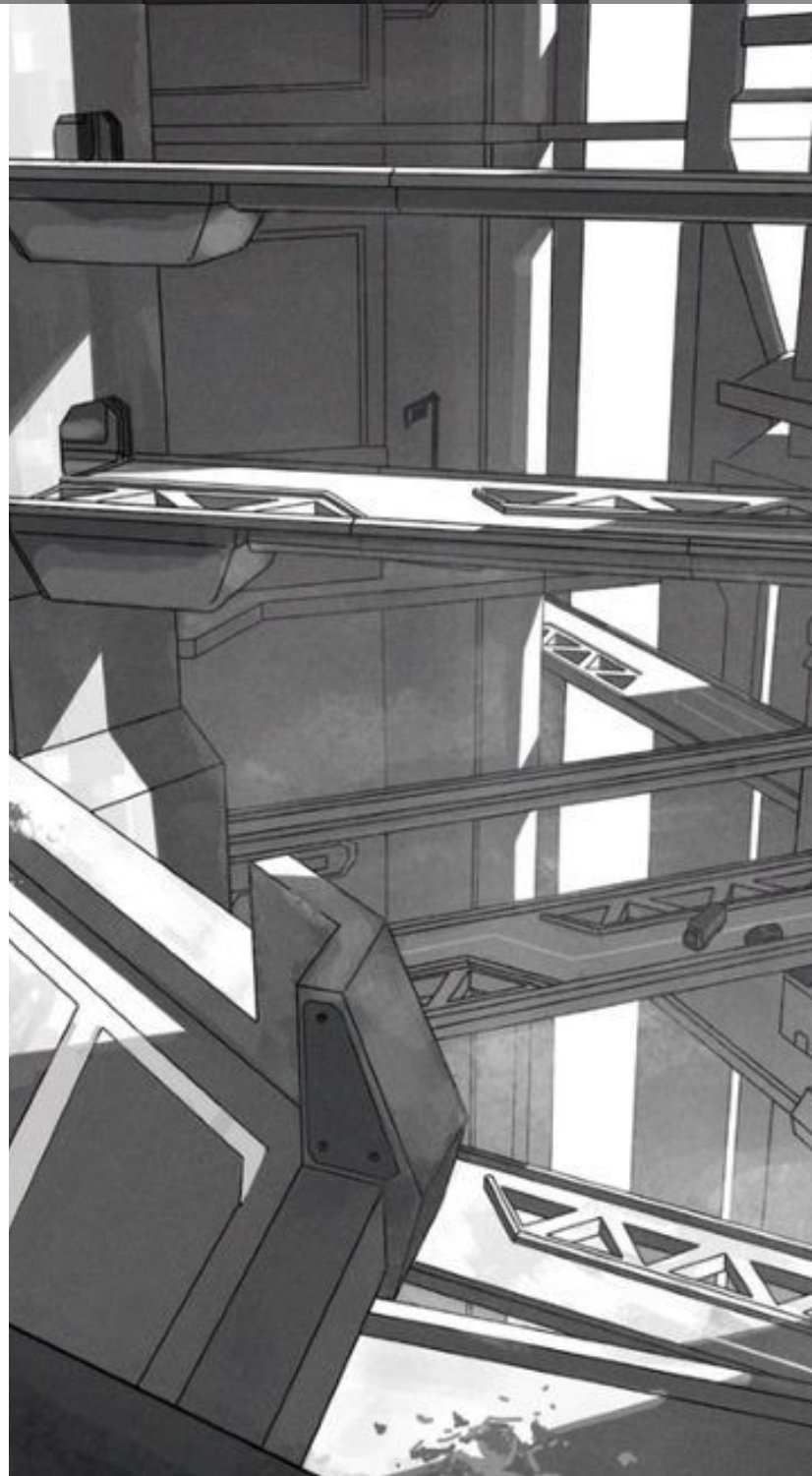
When you are ready to submit your e-portfolio, please send our admissions team a link to your work online.

We recommend that you set-up a dropbox.com account (for free) and upload your work to a folder online. You can then send our admissions team a direct link to view your eportfolio submission.

Our admissions team will contact you by e-mail to request your e-portfolio after you have made a formal application via UCAS.

To submit your portfolio, reply directly to our admissions team portfolio request e-mail.

If you have any questions about the submission process, please do not hesitate to contact us. (Details can be found at the end of this document)



Concept Art – Joseph Jones – Year 2



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3D Character Art by Erika Baunach - Year 4