

Project

3D Digital Game Art

POST-SECONDARY



1 INTRODUCTION

3D Digital Game Art 2025 Overview:

This pre-release project is intended to give you an idea of what to expect for the two-day competition in Regina 2025. Please see the Contest Description for more details.

During this competition, you will be challenged with 5 modules to demonstrate your skills. Each module will be judged independently and is independent of the previous module. Each module will have a distinct submission requirement. Each module will have you create an asset that is ultimately combined. In the final module, you will combine your results from each of the modules to create a final scene.

The modules will allow you to demonstrate:

- 1. Your ability to create concept art is based on a design brief.
- 2. Your ability to model a hard surface object and a hi-poly sculpted object.
- 3. Your skill with UV unwrapping, and your ability to surface models.
- 4. Your skill in preparing a model for animation, and to animate the model.
- 5. Your ability to combine files and publish them on a platform (Sketchfab).

The two days of competition will be broken into modules for a total of 12 hours.

- Day 1 will start with a modelling module followed by a UV mapping and surfacing module.
- Day 2 will start with time allocated to finishing the UV mapping and surfacing module, followed by an animation module, and finish with an exporting/assembly module.
- You are asked to complete the concept art module prior to the contest and arrive with the concept art. More details are provided below to help you start practicing for this competition.

The game art you will create for these challenges will be styled after a traditional Chinese aesthetic similar to the game Black Myth: Wukong. Aim for photorealistic look.

A detailed design brief will be provided at the beginning of the contest. The brief will detail the required models, surfaces, and animations for the challenge.

2 DESCRIPTION OF PROJECT AND TASKS

The competition will be composed of distinct modules over the course of two days. Additional details for each module are provided below.



Module 1: Concept Art

The first module will test your ability to create effective concept art. You are tasked with creating concept art for a Foo Dog or Chinese guardian lion. Produce a piece of full colour concept art showing 3 views of the described model (Front Elevation, Side Elevation, and Three-quarter Perspective views). Use your preferred tools to demonstrate your skills with perspective, shading, and proportion to illustrate model as described below. Feel free to use 3D software to setup shapes to draw over and aid you with perspective.

You can find more information on food dogs and their cultural significance here: https://decoroutdoor.com/blog/foo-dogs-chinese-feng-shui-protection-symbols/

Design Brief

Develop concept art of a Foo Dog or Chinese guardian lion. They are stylized lions believed to ward off evil spirits. The male lion holds a ball representing the world or power. These statues are rich in intricate details, including curly manes and fierce, wide-eyed expressions, embodying strength, protection, and prosperity in Chinese art and architecture.

Visual description:

A male Foo Dog or lion is depicted with a powerful, muscular frame with a fierce expression, and an open mouth. The dog/lion should be in a sitting position with its massive right paw resting on an embroidered, ornate, ball or globe. The hind legs should be in the default sitting dog position. All paws should have sharp claws. The tail must curve up along the back of its mane. It has a flowing, detailed mane resembling licking flames or curling waves or clouds. The mane should wrap underneath it's jawline. The four canine teeth should resemble fangs with a uniform shape and distribution. The rest of the teeth should form a square or flat-faced jawline. The nostrils should be flared, and the furrowed eyebrows should point downward or be narrowed in a menacing and authoritative look. Its ears should point upward.

The dog/lion should be adorned with a necklace band with intricate shapes and designs. The middle of the necklace should have a smaller lion-like face with its mouth grasping a ring attached to a bell. There should be three whiskers on each side of the face of the necklace band. The bell is constructed with a horizontal seam with an upper banding that has a circular repeating pattern around it.

The ball underneath it's right paw should have a repeating pattern around it. The pattern could be either floral or geometric.

PROJECT 50-3D Digital Game Art Post-Secondary Page 2 of 8



See second to last page of this document for reference images.

Concept Art Guidelines

- The digital painting demonstrates shading;
- The digital painting demonstrates perspective drawing skills;
- Digital painting indicates proportion.
- The concept should consider the motion of the parts included.
- Consistent colour palette, lighting, and proportions tied to design brief;
- All necessary information is conveyed for modelling purposes
- Digital painting views are labelled with the 3 requested views (Front Elevation, Side Elevation, and Three-quarter Perspective views)

Submission Guidelines

- Digital images (Should be submitted as a.jpg file format)
- Images should be 4K (3840 x 2160 pixels)
- Submissions will be collected by NTC members at the beginning of day 1 of the contest. (Communication systems will be explained on Day 1)

Module 2: Modelling

You will be modelling two assets for this module. Competitors will be provided with a detailed design brief on the day of the contest.

- 6. Item 1 (hard surface modelling) Competitors will model a solid surfaced item. Model should be produced with the possibility of animation in mind. Note; The model will only require materials like glass and metal, but contestants will have the opportunity to add surfacing details during the presentation module so basic or automatic UVing may want to be considered (Module 6).
- 7. **Item 2** (hi-poly/sculpting) Competitors will be challenged to model an intricate sculpted object. Note: The model will only require basic materials, but contestants will have the opportunity to add surfacing details during the presentation module so basic or automatic UVing may want to be considered (Module 6).

Modelling Guidelines

- Appropriate distribution of polys
- No Ngons
- Clean unified geometry

PROJECT 50-3D Digital Game Art Post-Secondary Page 3 of 8



Designs conform to the design brief

Submission Guidelines

- Each model in this module must be exported and uploaded individually to Sketchfab.
- Submit Sketchfab links to the NTC by the end of the module.

Module 3: UV Mapping & Surfacing

All competitors will be provided with the same unmapped model (FBX format) by the NTC. Competitors will create a UV map within their chosen 3D software. Submission of the UV map as a digital image is required for judging.

UV Mapping Guidelines

- UV Unwrap the objects provided. UV unwrap should cause as little distortion as possible to the wireframe and keep seams to a minimum. Note: Distortion of polygons should be kept to a minimum.
- Create UV Map appropriate to the model and professional standards, with the idea of surfacing them in mind.

Submission Guidelines

- We are looking for manually unwrapped shells in this module. (Do not use automatic unwrap tools)
- 8. Upon finishing the UVs on your model. Apply the supplied UVGrid.PNG file as a texture, then export and upload to Sketchfab for judging.
- Submit your Sketchfab link for judging by the end of the module.
- Submit your UV map as a digital image (screen capture) to the NTC by the end of the module.

Surfacing

After you have submitted the UV maps as requested, competitors will begin surfacing the same 2 models. Competitors will use their preferred tools to create detailed surfaces. Surfaces and textures are expected to follow the design brief that will be provided on the day of the contest.

Surfacing Guidelines

• The art style for these asset's surfaces should be inspired by the brief.

PROJECT 50-3D Digital Game Art Post-Secondary Page 4 of 8



- Materials and Maps should use a PBR workflow and aim for photorealism.
- Surfaces should represent the requested material attributes.
- The appropriate materials and textures should be developed for the various objects
- Maps should look seamless on the model, with no obvious joins or breaks in texture.
- A variety of physical materials should be represented
- 9. Multiple PBR maps should be used (normal, transparency, roughness, etc.)

Submission Guidelines

- The surfaced models must be exported and uploaded to Sketchfab.
- Send the completed Sketchfab links to the NTC by the end of the module.

Module 4: Animation

Competitors will animate their scene based on the design brief. They will be tasked to prepare and animate some of their models from the Modelling Module 2, and the supplied models in the Surfacing Module 3.

Animation Guidelines

- Ensure your animation loop is seamless and without glitches. The scene should end as it began.
- The animation should be produced with the Principles of Animation in mind, such as: ease in, ease out, anticipation, overlapping action, etc. (https://lesley.edu/article/the-12-principles-of-animation)
- The rig setup is appropriate for the desired animation.

Submission Guidelines

10. Create a draft quality video to demonstrate your animation (in Maya, create a "playblast", in Blender, a "Viewport Render Animation" in Max, a "Create Preview Animation"). Your video can show simple shading to allow judges to focus on the animation. Directions for where to submit the draft render will be given on the day of the contest.

Module 5: Export and Presentation

To complete this contest, competitors will combine the assets from the Modelling



Module 2 with their surfaced and animated assets from the Surfacing and Animation Modules 3 and 4. Competitors will combine their scenes and animation and upload the properly exported scene to Sketchfab within a ½ hour of the end of the competition.

Export and Presentation Guidelines

- Export: In addition to the final presentation, ensure you have exported the individual assets as explained in each module at the end of each module.
- For the final module, competitors must combine the required assets into a complete scene. The design brief will clarify the required components.
- Each module should reflect the requirements to fit into the game style as outlined in the provided design brief.
- At this point you may surface the components from the Modelling Module (2) if you so choose. This will be an exercise in time management at deadlines, so competitors will want to ensure they don't over scope this aspect.
- Prepare the scene, lighting, composition, post processing effects, and animation settings in Sketchfab to optimize the presentation as you see fit.

Submission Guidelines

11. Submit the finished Sketchfab link of your final scene to the NTC by the end of the contest for judging.

Please submit any questions regarding this document to either Dave Clampitt (Chair) mr.clampitt@gmail.com
Patty Chomseng (Co-Chair) pchomseng@gmail.com









These images are intended to be used as reference only! And are **NOT** intended to be used as final designs. Contestants are encouraged to follow this theme but come up with their own unique designs for this project based on the design brief provided. The contestants' designs should be produced with a 3D production pipeline in mind (i.e. Modeling, Rigging, Animation etc.) Again, feel free to use 3D software to setup shapes to draw over and aid you with perspective of your design.

Please feel free to reach out to the contest if you need anything clarified in the design brief.





