Skills Compétences Canada

Project

# 3D Digital Game Art

POST-SECONDARY

# 1 INTRODUCTION

3D Digital Game Art 2026 Overview:
This pre-release project is intended to give you an idea of what to expect for the two-day competition in Toronto 2026. 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 (Unreal).

The two days of competition will be broken into modules for a total of 13 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 an Art Deco aesthetic, similar to that of Rapture in the game Bioshock, for a 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.

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 an Art Deco Mantle clock. Produce a piece of full color 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 the Art Deco movement here:
https://en.wikipedia.org/wiki/Art_Deco

**Design Brief**

Develop concept art of an Art Deco mantle clock. It should visually suggest luxury, ambition, and progress. Your design should have bold geometry, strong contrasts and be visually readable and stylised. It should reflect retro-futurism and dystopian themes. Art Deco mantel clocks often incorporated animals, such as panthers, gazelles, antelopes, birds, and stylized dogs or horse. These animals were popular to express exactly what Art Deco valued: modernity, elegance, speed, and luxury. Your clock should incorporate an animal of your choosing.

**Visual description:**

An Art Deco clock contains an animal that is depicted with a sleek form that echoes the aerodynamic curves seen in Art Deco architecture, automobiles, and product design. Art Deco wasn't about realism, it was about turning natural shapes into clean, streamlined geometry. The animal should have 4 legs and be in a dynamic position. It may be constructed of chrome, bronze or a similar material, appropriate to the Art Deco design movement.

The animal should sit on a stone (such as marble, onyx) or metal base and the piece should incorporate a clock mechanism. Mantel clocks were often the centerpiece of a living room or study. The piece should be both functional and luxurious and should present as a status object, not just a basic timepiece.

The people of the 1920s–1930s were fascinated with a wide range of cultures around the world. Animal imagery belayed a sense of *exoticism*, modernity, and sophistication, and celebrated an appreciation for diversity of cultures.

Mantel clocks are traditionally horizontal forms. So, by placing an animal or a pair of animal figures, which were typically in long and low poses—on or surrounding the clock, it created a balanced composition, where the clock had a central mass and the animal or animals provided a linear, sometimes symmetrical, decorative crown.

See second to last page of this document for reference images. **Note: These are only to be used for reference, not for direct visual recreation.**

**Concept Art Guidelines**

- The digital painting demonstrates shading;
- The digital painting demonstrates perspective drawing skills;
- Digital painting indicates proportion.
- The concept should consider the dynamic pose of the character.
- 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.

**Item 1. Hard Surface Modelling.** Competitors will model a solid surfaced item. 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 UV mapping may want to be considered (Module 6)

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6. **Item 2**. **hi-poly model with sculpted component.** Competitors will be challenged to model an intricate object with a sculpted component. 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 UV mapping may want to be considered (Module 6).

**Modelling Guidelines**

- Appropriate distribution of polys
- No Ngons
- Clean unified geometry
- Designs conform to the design brief

**Submission Guidelines**

- Each model in this module must be exported as an FBX file and saved to the required folders. It must be able to be opened in any Industry software package.

**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 map the objects provided. The UV map should display 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 a 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)

7. Upon finishing the UVs on your model. Apply the supplied UVGrid.PNG file as a texture, then export and upload to appropriate Google Drive folder.

- Submit your FBX file 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 scene. 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.
- 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
- Multiple PBR maps should be used (normal, transparency, roughness, etc.)

### Submission Guidelines

- The surfaced models must be assembled in an Unreal Engine Level and uploaded to the required folder.

## Module 4: Animation

Competitors will animate their scene based on the design brief. They may be tasked to prepare and animate some of the models used in other modules.

### 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://en.wikipedia.org/wiki/Twelve_basic_principles_of_animation)
- The rig setup is appropriate for the desired animation.

### Submission Guidelines

8. 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 in the provided Unreal Engine project and upload the necessary files to the required folders within **30 minutes** 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 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 and lighting, in the provided Unreal Engine level to optimize the presentation as you see fit.

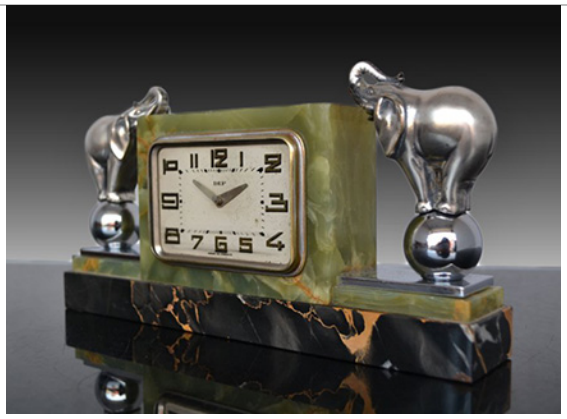
**Submission Guidelines**

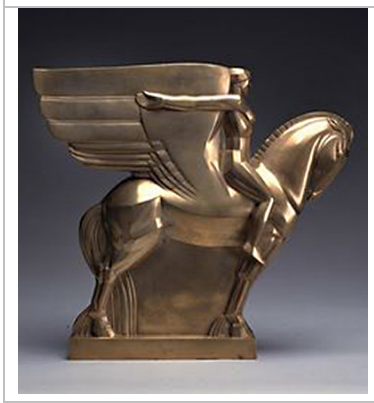
9. Submit the finished Unreal Engine project to the required folder by the end of the contest for judging.

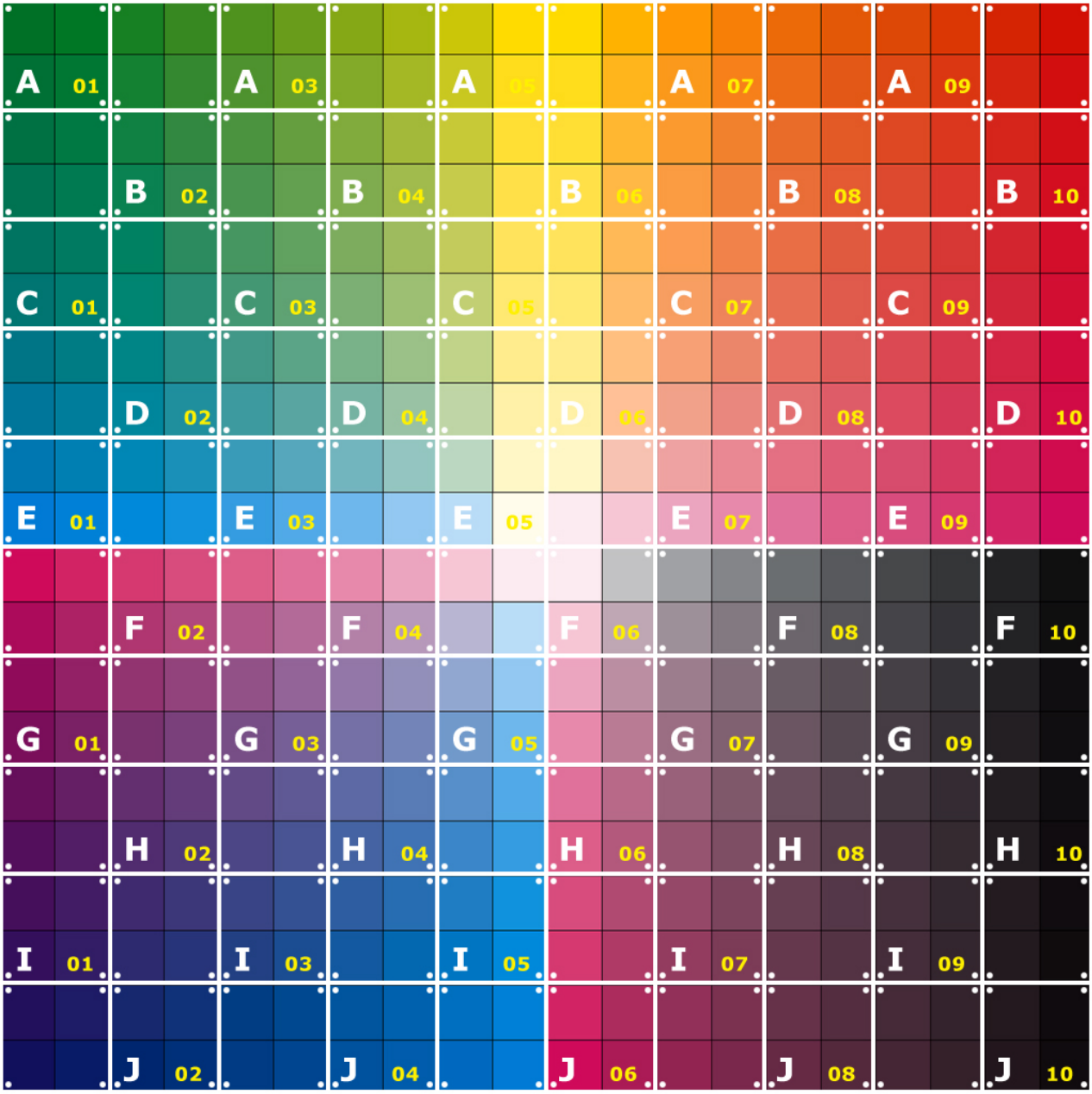
Please submit any questions regarding this document to either
NTC Chair Conor MacNeill cmacneill@niagaracollege.ca
Or
NTC Co-Chair Derek Ford fordd@assiniboine.net

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.



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