3D DIGITAL GAME ART

CONTEST #50
SECONDARY & POST-SECONDARY

1. Schedule & Registration

DATE Wednesday, April 15, 2024	
Time	
8:00-8:30am	Check-In, Setup and Testing. Hand in concept art model sheets. (Created prior to contest and submitted at the beginning of contest as PNGs)
8:30am	Competition begins
TBD	Lunch (provided)
3:30pm	Competition ends
3:30pm – 4:30pm	Judging
5:30pm	Medal Ceremony

Registration:
Post-Secondary competitors must be registered by a teacher with a username and password. Teachers needing usernames and passwords should contact **Shoshawna Blair** at shoshawna@skillscanada.bc.ca. Online registration fees are $135 per competitor.

2. Purpose of the Contest

This competition provides competitors with the opportunity to experience the 3D Game Art production process and demonstrate their knowledge and skill. A 3D Digital Game Artist takes a designer's brief and through a combination of conceptualization and specialized skills, fulfills the brief to the satisfaction of the client.

3. Project Overview

Competitors will have **7 hours** to develop assets, including models, textures, UV maps, and

exported artwork, which must be uploaded to **Sketchfab**. You may use any 3D software you are comfortable with for your work, if it can be exported to **Sketchfab** for judging. Please note you should be familiar with uploading FBX files to Sketchfab and ensuring that your lighting, models, and textures are optimized.

The intention of this competition is to create original artwork. All assets must be created on site during the competition. However, you are asked to complete the concept art module prior to the contest and arrive with the concept art. **AI software, tools, or generated imagery are not permitted for any asset, drawing, material, texture, or models created for this contest (Subject to disqualification).**

Task:
You will be challenged with 4 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.

Modules will allow you to demonstrate:

1. **Concept Art** - Your ability to create concept art based on a design brief.
2. **Modelling** - Your ability to model hard surface object & a hi-poly sculpted object.
3. **UV Mapping & Surfacing** - Your skill with UV unwrapping and your ability to surface models.
4. **Export & Presentation** - Your ability to combine files and publish them onto an online platform.

Design Brief:

ART DECO REVIVAL

This year's theme is **Art Deco**, focusing on the "Machine Age" aesthetics of the 1920s and 30s. Competitors must demonstrate their ability to blend geometric symmetry with organic, streamlined forms. The theme explores the evolution of **Art Deco** into the **Machine Age**, a period where industrial technology and art became inseparable. Competitors should research the transition from the ornate patterns of the 1920s to the **Streamline Moderne** aesthetic of the 1930s—a style defined by aerodynamic shapes, horizontal "speed lines," and a celebration of modern materials like chrome, glass, and polished wood. Your goal is to demonstrate a balance of geometric symmetry and streamlined, organic forms. Your assets should look like luxury items designed for the dawn of high-speed travel and industrial mass production.

Asset Description:

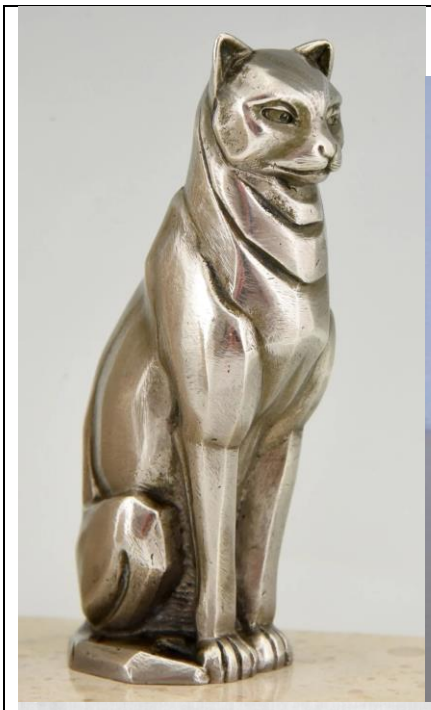
1. The "Streamline Moderne" Cat (Sculptural/Organic)

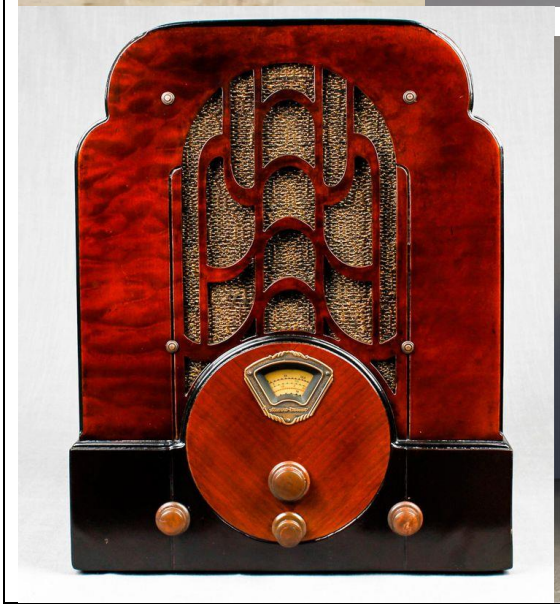
• **Description:** A decorative, tall figurine intended as a high-end luxury desk ornament.
• **Visual Direction:** Use the Streamline Moderne philosophy of "form following function." The anatomy must be simplified into a tall sitting, sophisticated position.
• **Materiality:** The figure should represent polished chrome or brass on a dark stone or wood pedestal.

2. The Waterfall Radio (Hard Surface)
• **Description:** A stylish desktop radio featuring the iconic Waterfall silhouette, a hallmark of late-1930s Streamline Moderne design.
• **Visual Style/Form:** The top of the radio should "flow" over the front edge in a continuous curve with no sharp corners—a classic Machine Age aesthetic. The front should feature symmetrical vertical grill fins and at least two circular tuning dials.
• **Materiality:** Use materials like high-gloss walnut wood for the body; Bakelite or plastic for contrasting elements, dials, and buttons. You may use brass accents for elements like the dial rings. Use a glowing emissive material for the tuning frequency window to suggest the unit is powered on.

Technical Considerations:
• **Model Complexity:** Maintain balanced polygon distribution, focusing on efficient topology for clarity and detail.
• **Scale Considerations:** Ensure the proportions remain appropriate for a small scale display piece (e.g., desk-sized).
• **Materials:** Competitors should apply simple materials, relying on surface properties such as reflectivity and roughness to define the materials visually.

Here are some reference images. **Note: These are only to be used for reference, not for direct visual recreation.**






©the Radio Attic

Modules

Module 1: Concept Art

The first module will test your ability to create effective concept art. You are tasked with creating concept art for the **Cat and the Radio**. Produce a piece of full color concept art

showing **3 views** of the described model (2 orthographic and 1 perspective).

- Front Elevation
- Side Elevation
- 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

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 PNG file format)
- Images should be 4K (3840 x 2160 pixels)
- Submissions will be collected by the PTC members.

Module 2: Modeling

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

1. Hard Surface Modelling – The Waterfall Radio.

All components should have materials and texture. All components should have a material but not a texture. Polycount budget is 50,000 Triangles/25,000 Quads.

2. Sculptural/Organic Modelling – The 'Streamline Moderne' Cat

All components should have a material but not a texture. Polycount budget is 50,000 Triangles/25,000 Quads.

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 USB provided. It must be able to be opened in any industry software package.

Module 3: UV Mapping and Surfacing

UV unwrap and surface ONLY the model provided for the competition.
Note: Module 3 uses a provided model (rather than your own creations) to ensure fair and consistent evaluation of UV mapping and surfacing skills across all competitors. This model will be revealed at the start of the afternoon session.

UV Mapping Guidelines

- UV map the object 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.
- Ensure the UV shells are clean, even, and logically arranged.

Submission Guidelines

- We are looking for manually unwrapped shells in this module. (Do not use automatic unwrap tools)
- Upon finishing the UVs on your model. Apply the supplied **UVGrid.PNG** (Pg. 13) file as a texture, then export and upload to the provided USB.
- Submit your FBX file for judging by the end of the module.
- Submit your UV map as a digital image (screen capture) to the PTC by the end of the module.

Surfacing Guidelines

Competitors will add texture and surface details to the provided model according to a design brief provided during the event. All texture maps should be 4096x4096 resolution, and

multiple maps (e.g., diffuse, normal, roughness) should be utilized to achieve a complete look.

Submission Guidelines

- Each competitor will upload their surfaced model to Sketchfab and submit the link for judging.

Module 4: Export & Presentation + File Management

Export and Presentation Guidelines

Competitors must assemble their final files and organize them according to best practices. Competitors should ensure files are properly named and organized for submission.

Export and Presentation
Competitors will assemble a complete scene using their own models along with the surfaced model from Module 3. The final scene must be uploaded to Sketchfab, where competitors should optimize the visual presentation by applying appropriate materials, lighting, and rendering effects.

Submission Guidelines

- Upload the final scene to Sketchfab and ensure it is publicly accessible. Submit the Sketchfab link for judging.

All work must be created onsite; no external files, rigs, or materials are permitted, and AI tools are strictly prohibited.

Internet Use: You can use the internet for research but not for downloading files or rigs or to communicate with any coaches. You are not permitted to communicate with your coaches or tutors during the competition hours.

4. Number of Stations / Allocations

BYOD - Bring Your Own Device

Supplied by Skills British Columbia Technical Committee:

- Workspace: table, chair, electrical outlet

5. Skills & Knowledge to be Tested

- Interpretation of Design Brief

- Develop Concept Art
- 3D modeling
- Lighting
- UV Unwrapping & Texturing
- Organization & File Management
- Exporting & Uploading Files

6. Prerequisites

SCNS Prerequisites

- Enrolled in a community college, university or private school OR be registered as an apprentice with the Ministry of Advanced Education, Skills and Training;
- Registered as a competitor with Skills Canada – British Columbia;
- The competitor cannot be a certified journey-person;
- Have been earning post-secondary credits any time during the academic school year (September to June);
- All competitors must be able to show either current apprenticeship status and/or proof of enrollment in a post-secondary institution upon request of the Provincial Technical Committee (PTC).

7. Equipment & Software

3D GAME ART IS A 'BRING YOUR OWN DEVICE (BYOD) CONTEST. NO EQUIPMENT OR SOFTWARE WILL BE SUPPLIED.

Suggested Recommended Hardware Requirements:

- Intel Graphics Workstation i7 Quad Core Processors
- 1 TB HD
- 16Gb RAM
- Dedicated video card (suggested 2GB) as approved by Autodesk
- Flat Panel Display 1920 x 1080
- Operating System – Windows 10/11 or Mac OSX
- Wi-Fi enabled computer system

Suggested Software:

- 3D Software: 3D Studio Max, Maya Blender, Zbrush
- 2D Software: Adobe Photoshop or Illustrator, Krita, Clip Studio or GIMP, Substance Painter

Competitors can use any 3D and 2D software they are comfortable with the absence of files, rigs, materials or texture libraries

Additional Equipment and Material Recommendations:

- Drawing Tablet and driver (driver compatible with your system)

- Headphones
- Pencils and erasers, sketchbook
- Any adapters that you may require to connect your hardware to the network and displays
- Memory stick or external hard drive

8. Evaluation & Judging Criteria

SCORESHEET

Module 1 – Concept Art	
Creative and original interpretation of the design brief	3%
Concept art is clearly labelled and illustrated in 3 views	3%
Concept art demonstrates proper proportions	3%
The final concept features shading techniques to represent form of the objects	3%
Exhibits use of color theory	3%
Total	**15%**
Module 2 – (A) Model Cat Organic)	
Model contains soft and hard surfaces	3.3%
Meets triangle budget	3.3%
No Ngons, clean unified geometry	3.3%
Edgeflow follows the topology of the object	3.3%
3D asset conforms to the concept art	3.3%
3D interpretation of the concept art is proportioned to realistic dimensions	3.3%
Module 2 – (B) Model Radio (Hard surface)	
Model contains hard surfaces and chamfered edges on any 90-degree edge	3.3%
Meets triangle budget	3.3%
No Ngons, clean unified geometry	3.3%
Edgeflow follows the topology of the object	3.3%
3D asset conforms to the concept art	3.3%
3D interpretation of the concept art is proportioned to realistic dimensions	3.3%
Total	**40%**
Module 3 – UV Unwrapping	
The UV islands are proportional to the corresponding areas on the model	5%
Smooth and even distribution of UV shells: asset has separate UV	5%

shells that represent understandable elements of the model	
No overlapping UVS (unless intended ex. mirroring)	5%
Use of UV spacing to maximize texture sheet use without bleeding or overlapping	5%
Total	**20%**
Module 3 – Texture Mapping/Surfacing	
Texture and shading display an understanding of color theory & realistic construction	4%
Textures conform to the overall art style of the design brief	4%
Texture looks seamless on model, no obvious joins or break in texture	4%
Texture files are no more than 4096 x 4096 pixel resolution and organized naming of maps	4%
An appropriate variety of physical materials have been represented. Multiple surface maps have been used (normal, roughness, color, etc.)	4%
Total	**20%**
Module 4 – Export & Presentation + File Management	
Ability to follow instructions and deliver assets & files as directed.	1%
File is properly submitted on time to competition	1%
Models open and view without errors	1%
Logical naming conventions are used for objects, files, and textures	1%
Final product is enhanced with Sketchfab's lighting	1%
Total	**5%**
TOTAL	**/100%**

In the event of a tie, the competitor with the highest score in Module 2 will be declared the winner. If there is also a tie in Module 2, then the highest score in Module 3 will be declared the winner. If there is another tie, then the highest score in Module 1 will be declared the winner.

9. Additional Information

Frequently Asked Questions (FAQ)

What do I design?

Competitors will be given written descriptions under section 3, the "Design Brief."

What happens if my work does not adhere to competition specifications?

Work that does not conform to or exceeds the specifications described in the design brief will not be judged and will be disqualified.

Where do I submit my projects?

Upload your model on to sketchfab. This article explains the steps to uploading to your account.
https://help.sketchfab.com/hc/en-us/articles/202508836-Uploading?utm_source=website&utm_campaign=upload_hints
And here is a Youtube video explaining the process of how to present and edit your model.
https://www.youtube.com/watch?v=VWjYbb8t7Iw&ab_channel=GrantAbbitt

How much time do I have?

All tasks must be completed by the end of the 7-hour competition.

Can I use my own files?

Competitors are not permitted to bring their own files, rigs, materials or maps for use during the competition. Only the concept art may be brought in advance.

Can I use the Internet as a resource?

Competitors can use the internet for image reference or online help files. Competitors may not receive coaching in person or online during the competition.

Can I use my own tools?

Digital Drawing tools such as tablets are permitted. If bringing your own tablet, please bring tablet drivers to the competition. Contestants will be responsible for installation and troubleshooting their devices.

What software should I use?

Remember you are providing your own computer and software. It is suggested that you use 3D software that you own such as Maya, Blender, 3DS Max. Competitors need 2D software such as Adobe Photoshop or Krita. (Please see information on suggest/recommended software in section 7). Competitors are responsible for their own IT support therefore you must ensure that everything works in advance.

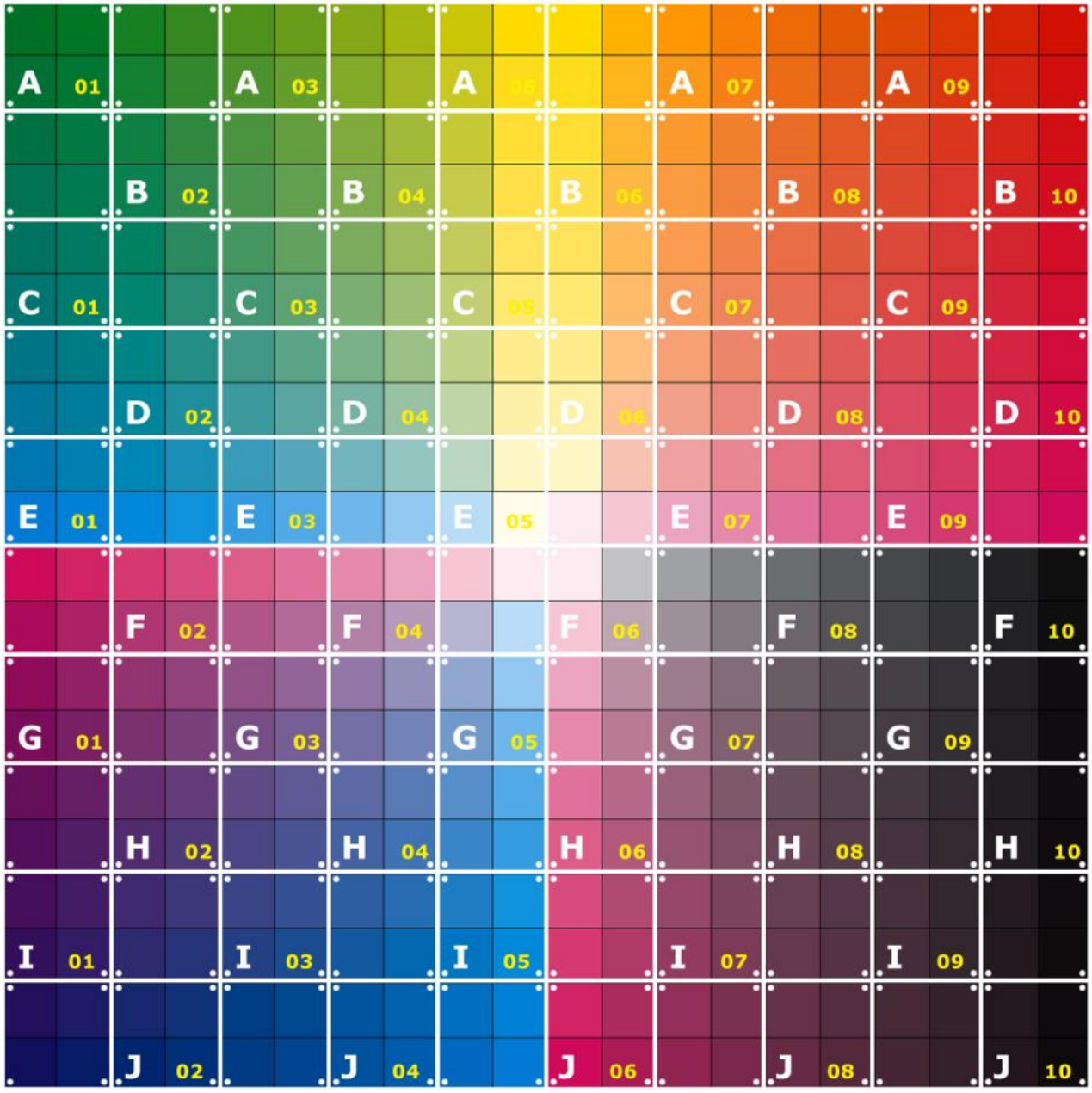
Do I need to stay in the competition area the whole time?

Yes, during the competition all competitors must remain within the proximity of the competition area, as specified by the Provincial Technical Committee (PTC). However, bathroom breaks are permitted.

Can I communicate with my coaches, friends, and family during the competition?
Communication with non-competitors is not permitted during the competition through any means. (i.e. mobile devices, text, email etc.) You may use your phone to listen to music with headphones.

10. PTC Contact Information

Provincial Technical Committee Members		
Patty Chomseng	Technical Chair	Scbc3dgameart@gmail.com
Tim Tang	Co-Chair	Timtang3d@gmail.com
(TBD)	Judge	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