

DATE		LOCATION	
Friday April 5th, 2024		NSCC Ivany Campus	
TIME	TASK		
9:00am	Hand in 1 detailed concept art model sheets with correct proportions and perspective. (Created prior to contest and submitted at beginning of contest as PNGs. Model sheets should be a minimum of 2000 x 1200 pixels.		
9:00am – 9:15am	Orientation		
9:15am – 12:00pm	Production time – modelling due at 12:00pm		
12:00pm – 12:30pm	Lunch		
12:30pm – 3:45pm	Production time - Models provided to uv unwrap, texture and animate.		
4:00pm-5:00pm	Judging		
5:00pm	Awards		

### 1. Purpose of Contest

This competition gives competitors the opportunity to experience the 3D Game Art production process and demonstrate their knowledge and skill. The 3D Digital Game Artist takes a designer’s brief and, through a combination of conceptualization and specialist skills, completes the brief to the satisfaction of the client.

**The intention of this competition is to create original artwork. All assets must be created on site during the competition except for the concept art which will be done before the competition but must be submitted as digital PNG files at the beginning of the competition. All models must be clearly labeled and have 3 views. No AI is to be used.**

**2. Criteria**

<b>Employability Skills:</b>	<b>Preproduction:</b>	<b>Production:</b>
<b>Reading, problem solving, Critical thinking</b>	<b>Interpretation of a Design Brief</b>	<b>Following instructions</b>
<b>Time management</b>	<b>Creation of Concept Art</b>	<b>Asset Construction</b>
<b>Planning</b>		<b>Texture mapping &amp; UV Unwrapping</b>
<b>Attention to detail</b>		<b>Exporting</b>
		<b>File Management</b>
		<b>Appeal of Final Product</b>

**Overview**

During this competition, you will be challenged with 6 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. For 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. Your ability to create concept art based on a design brief.
2. Your ability to model a hard surface object and a sculpted organic object.
3. Your skill with UV unwrapping.
4. Your ability to texture models.
5. Your skill to rig & animate the model.
6. Your skill to publish your files onto an online platform.

Competitors will be given 6 hours to develop assets including models, textures, uv maps and exported artwork which will be uploaded to Sketchfab. The style this year is Steampunk. Your models should follow this design aesthetic. Together the models must total 12,000 tris. Individual texture maps should be no more than 1024x1024 pixel resolution.

Your work can be created in whatever 3D software you are familiar with and be exported into Sketchfab for judging. Note: You should be familiar with uploading FBX files Sketchfab and ensuring your animation and lighting is optimized.

### **Design Brief - Steampunk Jeweler's workshop**

You are creating items to add to a cluttered steampunk watch maker/ jeweler workshop cluttered with steampunk collectables. You will be provided with some items to add to the scene.



<https://sketchfab.com/3d-models/astronomical-vintage-props-low-poly-pack-604cf997e1f14d82b9106b43032ccc24>

On the table is a high steampunk chest/box which opens. When the door opens, a drawer slides out revealing a steampunk firefly sitting on a green plush velvet cushion. When the drawer is fully opened the firefly animates, emerging from the box above cushion and (Optional: lighting its bulb). Lying next to the chest on the table is a Steampunk hat. Papers flung around. You may add other props if you have time. The camera must be positioned to ensure animation is seen and uses composition to enhance the overall final scene in sketchfab.

**Assets to create:**

**Module 1: Concept Art**

The first module will test your ability to create effective concept art. You are tasked to create a model sheet for **metal fire fly and a steampunk leather hat.** Produce one full colour concept art model sheet. Demonstrate your skills with proportions and shading to illustrate the rat in three positions, front, right-side, and ¾ view. For this concept art, use computer software such as Photoshop, Procreate, Krita, Corel painter, etc. to complete a PNG image containing the finalized designs.

**Module 2: Model hard and soft objects together**

Model: Leather steampunk hat and a metal firefly:

Competitors are required to export their model(s) to Sketchfab and illuminate them. The finished models (that you build) should not exceed a total limit of 12,000 tris (not including anything provided by skills).



<https://sketchfab.com/3d-models/steampunk-fly-low-poly-dad20b81b54e4541922a2c2792363f92>



Resource: Steembay Auction (2023) Nov 08,  
<https://steemit.com/steembay/@armadilloman/steembay-auction-steampunk-leather-hat-band-hand-tooled-and-made-by-armadilloman>

### **Module 3: UV unwrapping models**

Skills will provide a model(s) to be unwrapped. NOTE: You will not be evaluated on the UV mapping of your models.

### **Module 4: Texturing models**

Texture map the provided model(s). Texture maps should **not** exceed a pixel resolution of 1024 x 1024. Texture files and names must follow a standard naming convention. Multiple texture maps should be incorporated into materials or shaders which are applied to the competitor's model.

### **Module 5: Rigging and Animation**

Contestants will rig and animate the box opening and the firefly emerging and flying out of the box, (Optional: its tail lighting). Using limited rigging to show at least 2 animation principles: squash and stretch, slow-in slow-out, anticipation and/or follow-through.

### **Module 6: File management**

Competitors are required to illuminate their model and export it to the skills NS Sketchfab. It should be viewed from a fixed camera position and be able to be rotated in 360-degree rotation. Models, maps and materials should conform to the design specification and art style defined in this brief. Models must be set to be viewable and links provided to the Skills judges when uploaded. Verify your links!

All work is to be created onsite. No files, rigs, materials can be brought in or accessed onsite.  
No AI.

**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.

### **3. SCNS Prerequisites**

- Post-Secondary competitors must meet the following criteria in the current school year:
- Be enrolled in a community college, university, private school OR be a registered apprentice with the Department of Labour and Advanced Education (Apprenticeship Agency);
- Be registered as a competitor with Skills Canada – Nova Scotia;
- The competitor cannot be a certified journey-person;
- Possess Canadian citizenship or Permanent Resident (Landed Immigrant) status and be a resident of Nova Scotia; or be a registered International Student. Competitors are responsible for verifying this information if requested;
- Have been earning post-secondary credits in a sector relevant to the one in which they wish to compete (i.e. to compete in carpentry, the student would be earning credits in any construction-related trade) at 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) or Skills Canada – Nova Scotia.
- Have completed and submitted a signed release form

### **4. Equipment, Materials and Clothing**

**The 3D Game Art competition will be BYOD, (Bring Your Own Device for each competitor.)** No equipment will be supplied.

This is the suggested 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
- Sound card

- Operating System –Windows 10 or Mac OSX
- WiFi enabled computer system.

Suggested software:

- 3D Software: 3D Studio Max, Maya, Blender.
- 2D Software: Adobe Photoshop or Illustrator. Autodesk Sketchbook. Krita, Clip

Studio or GIMP, Zbrush, substance painter.

- Viewing Software: VLC
- Additional Equipment and material suggested.
- Tablet and driver (Driver compatible with your system)
- Headphones
- Pencils and erasers
- Required clothing (Provided by competitor)
- No special requirements

#### 5. Safety Requirements

List of required personal protective equipment (PPE) provided by competitors  
No (PPE) required.

#### 6. Evaluation & Judging Criteria

Point breakdown.

Module 1 - Concept Art	Submitted at start of contest. Concept Art follows design brief specifications.	15%
Module 2 - Modeling	Modelling	30%
Module 3 UV unwrap	UV unwrap provided object models.	10%
Module 4 Texturing	Texture provided objects.	20%

Module 5 Rigging and animation	Rigging and Animation: Rig and animate provided objects.	15%
Module 6 File management	Upload: Upload your files to Sketchfab and test 30 minutes prior to the end of competition. Provide working link to judges	10%

## 7. Additional Information

### Test Project change at the Competition

Variations in the design brief may be given onsite to test competitors' creativity.

### Tie (No ties are allowed)

In the event of a tie, the team with the highest score in the Modeling will be declared the winner. If there is also tie in Modeling, then the highest score in the UV and texturing will be declared the winner.

### Competition rules

Please refer to the competition rules on the Skills Canada – Nova Scotia [website](#).

## 8. FAQ's

### What do I design?

Competitors will be given written descriptions of game assets and a description of the game world to which it belongs.

### What do I create?

By the end of the 6-hour event, you will create 3D models mapped with texture maps created during the competition exported to Sketchfab.



**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.

**How much time do I have?**

During the 6-hour competition, all tasks must be completed by the end of the 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.

**Can I use the Internet as a resource?**

Competitors can use the internet for general help or reference during the competition but may not receive online coaching.

**Can I use my own tools?**

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

Can I use my cell phone during the competition: During the competition you may use your cell only for listening to music or as an emergency resource.

**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. Competitors are responsible for their own IT support so 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 National Technical Committee

**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. Cell phones, text, email)

**9. Scoresheet**

Module 1 – Concept Art (3 points each)	15%
<p>Model Sheets follow design brief specifications.</p> <ul style="list-style-type: none"> <li>• Concept art is in the style of the design brief.</li> <li>• Concept art is clearly labelled and illustrated in 3 views.</li> <li>• Concept art demonstrates proper proportions.</li> <li>• The final concept features shading techniques to represent form of the object.</li> <li>• Some color has been employed.</li> </ul>	<p>1__ 2__ 3__ 4__ 5__</p>
Module 2 - Modelling (6 points each)	30%
<p>Modelling</p> <ul style="list-style-type: none"> <li>• Contains soft and hard surfaces.</li> <li>• Modelled for animation.</li> <li>• Appropriate distribution of polys under 10,000 tris</li> <li>• No Ngons, Clean unified geometry</li> <li>• Designs conform to the design brief</li> </ul>	<p>1__ 2__ 3__ 4__ 5__</p>
Module 3 – UV unwrapping (2 point each)	10%

<p>Model 1 UV unwrapping provided models</p> <ul style="list-style-type: none"> <li>• The UV islands are proportional to the corresponding areas on the model.</li> <li>• Smooth and even UV shells: major asset has separate UV shells that represent understandable elements of the model.</li> <li>• There are no distortions of texture maps, stretched, etc.</li> <li>• Seams are kept to a minimum and hidden as much as possible on the object.</li> <li>• Texel density is even across the UV space and only scaled when necessary</li> </ul>	<p>1__ 2__ 3__ 4__ 5__</p>
<p>Module 4 - Texture Mapping (4 point each)</p>	<p>20%</p>
<p>Main Model texturing</p> <ul style="list-style-type: none"> <li>• Surface Textures describe materials correctly. The appropriate materials have been created for the textures, skin on skin, metal on metal etc.</li> <li>• Texture looks seamless on model, no obvious joins or break in texture.</li> <li>• Texture is consistent with model sheet; textures conform to the overall art style of the project.</li> <li>• A variety of physical materials have been represented, e.g., wood, plastic, metal, fabric, skin, hair.</li> <li>• Multiple maps have been used, Normal, transparency, etc.</li> </ul>	<p>1__ 2__ 3__ 4__ 5__</p>
<p>Module 5 - Rigging &amp; Animation (3 points each)</p>	<p>15%</p>
<ul style="list-style-type: none"> <li>• The model has been rigged for animation.</li> <li>• Joints are placed in appropriate positions for topology of object.</li> <li>• At least two animation principles can be seen (slow-in slow-out, anticipation, follow-through).</li> <li>• The animation loop is appropriate for the intention.</li> <li>• The animation loop plays smoothly without skips.</li> </ul>	<p>1__ 2__ 3__ 4__ 5__</p>

Module 6 - file management (2 points each)	10%
<ul style="list-style-type: none"> <li>• Logical naming conventions are used for objects, files and textures.</li> <li>• Models open and view without errors.</li> <li>• Animation is working in Sketchfab.</li> <li>• Final product is enhanced with sketchpad's lighting.</li> <li>• File is properly submitted on time to competition</li> </ul>	1__ 2__ 3__ 4__ 5__
<b>TOTAL</b>	<b>100%</b>

**10. PTC Contact Information**

<b>Name</b>	<b>Employer</b>	<b>Email</b>
Robert Gibson	NSCC Truro Campus (retired)	<a href="mailto:Robertgibsonemail@gmail.com">Robertgibsonemail@gmail.com</a>
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