

# Board/Authority Authorized Course Framework Template

School District/Independent School Authority Name:

## Goals and Rationale:

### Rationale:

British Columbia is rapidly attracting a concentration of video game production companies. Employment and compensation opportunities provided in this industry are among the fastest growing in Canada's knowledge-based economy. This academy will provide our students with an opportunity to participate in curriculum that can be tied to nearly any future employment opportunity, while gaining skills specific to the fields of video game creation, digital animation and programming. Additionally, students will develop cross-curricular knowledge and skills in disciplines such as Mathematics, Science, and Art. Additionally, this academy connects students to post-secondary institutes that offer either scholarship opportunities or dual credit for Computer Science courses.

### Goals:

- 2D and 3D digital art generation in addition to 3D and 2D animation
- Programming principles common to every programming language
- Game design concepts that create enjoyable experiences
- Principles of art and animation that create a pleasing aesthetic
- Proficiency in using a modern game engine to create a video game
- Time-management and project-management strategies
- Collaborative problem-solving
- Mathematics and Physics concepts utilized to create real-time interactive simulations (video games)

## Aboriginal Worldviews and Perspectives:

The opportunities to explore aboriginal perspectives within Art and Game Design are significant. This is a heavily project-based course with numerous opportunities to explore topics of personal or societal interest. Students will be encouraged to both incorporate aboriginal artistic elements in their projects as well as to explore culturally relevant topics.

Aboriginal speakers can be invited into the classroom to comment on the appropriateness of integrating their culture into a product such as a video game and the considerations students would want to take into account when developing projects inspired by aboriginal cultural elements.

Some of the First Peoples Principles of Learning closely tied to this course include:

- Learning is holistic, reflexive, reflective, experiential and relational
- Learning involves recognizing the consequences of one's actions
- Learning is embedded in memory, history and story
- Learning involves patience and time
- Learning requires exploration of one's identity

### Big Ideas

Game design is a complex process requiring thoughtful planning and time management	Working with a team requires compromise and regular communication in order to achieve collective goals	How others perceive and interact with our products should shape how those products are developed and evolve over time	Digital media is a large industry with a wide variety of career opportunities	Developing a complex project generally involves working with a team of individuals, each of whom have unique talents and personalities
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### Learning Standards

#### Curricular Competencies

#### Content

Students are expected to do the following:

#### Programming:

- Communicate ideas using common technical language that will be understood by anyone with a fundamental understanding of programming
- Learn and apply programming skills necessary to develop required project elements, seeking out expertise both within and beyond the classroom

#### Design:

- Communicate ideas using language and terminology that will be understood by anyone with a fundamental

<p>the values and priorities of all group members</p> <ul style="list-style-type: none"> <li>• Present final product to industry experts in a presentation that includes both audio and visual elements</li> <li>• Organizing group tasks using Scrum project management methodology</li> </ul> <p>Mathematics &amp; Physics:</p> <ul style="list-style-type: none"> <li>• Learn and apply mathematics necessary to develop required project elements, seeking out expertise both within and beyond the classroom</li> </ul>	
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**Big Ideas – Elaborations**

None

**Curricular Competencies – Elaborations**

None

**Content – Elaborations**

None

Recommended Instructional Components:

- Direct Instruction
- Demonstration
- Modeling
- Peer Teaching
- Experiential Learning
- Reflective Writing
- Project-based Learning

Recommended Assessment Components: Ensure alignment with the [Assessment](#)

[Principles of Quality](#)

- Journaling
- Self-assessment
- Performance Assessment
- Skills-based Assessment
- Formative feedback

- Iterative Assessment

One Working Model:

Students will be given formative feedback during the instructional components of the course. This feedback is to help students understand their areas of strength and areas of challenge so that they can properly scope their projects and identify areas in which they may need to seek additional assistance and/or resources.

During formal assessments and projects, key skills will be identified to students at the project outset along with levels of proficiency within each of those skills. Each level of proficiency will have descriptive statements of what a student needs to demonstrate in order to achieve that level. Students will be reminded of this document throughout a project so that they can plan accordingly. At the conclusion of the project students will be asked to self-assess themselves and indicate what proficiency level they believe they have achieved for each skill attached to that project. For each skill students will be asked to provide evidence for