



Intro to Interactive Digital Media – Grade 10

Digital Citizenship & Careers in IDM

Finding your personal voice

Students will explore their own talents and interests, and develop a sense of what areas of Interactive Digital Media are of personal interest.

Program goal: Provide opportunities for students to explore many aspects of Interactive Digital Media in a positive, collaborative environment

Digital Citizenship

Students will explore how their personal actions and inactions, conversation and communications influence others, in the classroom, local community and globally.

Program Goal: To provide positive pathways for interaction with a global community

Career Exploration

Employability for IDM

What are desirable personal characteristics for individuals in the IDM industry?

What are the educational and training pathways for employment in IDM?

Students will explore what the pathways are for at least two different areas of interest within the Interactive Digital Media industry, and chart independent learning and post-secondary training available in these areas.

Program Goal: To provide opportunities for students to engage with industry and explore career pathways through education and employment

Sustainability in IDM

Technology changes rapidly. What are some strategies individuals and businesses can utilize to ensure productive careers and sustainable growth? What are some technologies that IDM businesses can utilize to reduce demand for natural resources?

Program Goal: To explore how IDM businesses and workers can plan for long term sustainable growth, reduce the negative impact of disruptive change, and increase positive influences of interactive digital media

There will be group and/or individual assignments in each of these areas

Media Assignments:

Portfolio Creation – Prototyping Mark out of 100 each term

Graphic Creation Mark out of 10 – Portfolio Banner

- Creation of a portfolio header graphic that displays personality, clarity and invitation

Programming Mark out of 10 – Responsive Portfolio Template

- Creation of an HTML5/CSS3 portfolio template which responds to screen size and device type

Interface Design Mark out of 10 – Portfolio

- Creation of a clear, functional UX design for the content of a portfolio

Digital Citizenship Content

- Creation of content displaying the student's understanding of digital citizenship

Personal Pathway Content

- Creation of content displaying the student's personal pathway for employment in IDM

Project Documentation

- Screen Captures, images, clips, documents, recording the student's concepts and collaborative work

Film Creation

How to animation and film companies produce engaging stories in visual form?

Students will be introduced to the principles of cinematography, and the processes of video editing through tutorials and instructions.

Students will conceptualize and plan a 1 min. long, stop motion animated film, or 5 min. live action dramatic film, or documentary, on the theme, “Voices”.

Students will present their ideas to the class, as storyboards. Students will then form teams of no more than 3 for stop motion, no more than 4 for live action, produce a final storyboard, character sheets and a prototype animation or film.

- Final Product for a live action or documentary is a 1920 x 1080 h.264 video file for live action or documentary films.
- Final Product for stop motion or 2D animation is a 720 x 480 h.264 video file.
- Each student will be responsible for their own final edit.
- Each team may select 1 or more versions to be presented to the class.
- All projects will receive a prototyping mark out of 100.
- Additional marks out of 10 will be awarded for Project Planning, Cinematography, Editing, Titling & Effects, Audio/Music track.
- Final Projects will be presented in class, during the final week in the term.

End Term 1

Game World Map & Level Design

How do Game Designers design worlds? What are some interesting obstacles, challenges and puzzles, that would make a game world interesting and entertaining?

Students will conceptualize and plan a ‘Game World’ by creating game maps, and concept art for a single player game level, based on the theme “World of Danger”. Students will present their level ideas to the class, receive comments and criticisms, and review and revise their plans.

Technical Requirements:

1. The build target for the game is HTML5 – WebGL with Mac as a fall back.

2. Due to the build target, low-poly models and mobile level shaders are essential.

Team Development

Students will group together to form development teams, with a minimum size of two people. Teams will develop an overall concept, incorporating ideas from individual level designs, planning for 1 level per team member.

Training Resources

As the teams develop their concepts, they will also acquire training and additional resources:

Skills Required:

Terrain development: The 3D world need topography, geology, vegetation.

Player Controls: There are Prefabs that provide basic player movement. How will the player battle the monsters? This will require additional programming and other assets.

3D asset development: Items such as buildings, props, characters may be downloaded, others may need to be created.

AI development: Monsters will need to find the player, chase the player and battle the player.

VFX: Particle systems are useful for explosions,

User interface development: The game needs a title, control buttons, health controls, additional UI elements as required.

Game Optimization: There are steps during all phases of game development which will help the game to run at an optimized frame rate.

Basic instruction will be provided in each of these areas, in preparation for level creation in Term 2, however additional resources may be needed as required for the game concept.

Iterative Process for Project Development

The process for the development of each project will of course vary according to the project.

Asset Creation

Creation of digital assets, 2D or 3D Graphics, Animations, Interfaces, Code, Audio, Video, Music

Project Assembly

Coordination of audio, visual, code, text assets into a prototype

Creation of Documentation content for portfolio website.

Prototype Development – Prototype Mark out of 100 term 2 only

Each project will develop a minimum of 2 prototypes of the project as it develops.

Alpha prototype is due 2 weeks before end of term.

Beta prototype is due on the date of the last regular class in the course, before 3:10

Animations and films should have storyboards and animatics for a minimum of 3 scenes, and a suggested length of 1 minute per team member for animations 5 minutes per team member for films.

For final assessment, animations and films are expected to have a completed rough cut complete with titles and credits.

Games and VR projects should have detailed Game Development Documents, level maps, character sheets for a minimum of 1 level per team member complete with a title, interfaces and credits.

Suggestions for developing project ideas:

Curricular connections can be developed easily: with ELA through storytelling focusing on Character, Social Studies through an historical or cultural setting or theme such as Immigration, Indigenous Issues, Science through environmental themes.

COURSE ASSESSMENT – Each assignment may contain aspects from several categories.

EMPLOYMENT READINE - Attendance, Collaboration, Engagement, Career Pathway - 10% [Portfolio, Class Activity]

DIGITAL CITIZENSHIP: Online Safety, Online Citizenship & Digital Presence, Copyright awareness – 5% [Portfolio, Class Activity]

SUSTAINABILITY: Awareness of the impact of Interactive Digital Media as a communication form and as an industry – 5% [Portfolio, Class Activity]

PROJECT PLANNING: Creation of conceptual and planning documents, such as Sketches, storyboards, maps, character turnarounds, etc. - 10% [Portfolio, Sketchbook, Digital files, etc.]

ASSET CREATION & EDITING: Creation of digital assets, video shots, graphics, 3D models, 2D or 3D characters, animation shots or clips, soundtracks, music tracks etc. 25% [Portfolio, Sketchbook, Digital files]

PROGRAMMING: Creation of programming assets such as portfolio pages, game scripts. 20% [Portfolio, Game Assets]

PROTOTYPING: Creation of testable products, such as video files, animations, games. 25% [Portfolio, Project Files]