9098: ADVANCED
INTERACTIVE DIGITAL ASSET
CREATION (12A)

40S/40E/40M

An Interactive Digital Media Course

# 9098: Advanced Interactive Digital Asset Creation (12A) 40S / 40E / 40M

#### Course Description

This course builds on the skills and knowledge learned in 9096 Interactive Digital Asset Creation. Students will learn the skills related to creating advanced features of dynamic asset creation, and to applying code to assets.

- **Goal 1:** Describe and apply appropriate health and safety practices.
  - **GLO 1.1:** Describe and apply appropriate **health and safety** practices.
    - SLO 12A.1.1.1 Describe and practice online safety.

      SLO 12A.1.1.2 Demonstrate the ability to maintain a safe and organized workspace.

      SLO 12A.1.1.3 Demonstrate the ability to keep cables safe and uncluttered.

      SLO 12A.1.1.4 Demonstrate awareness of health and safety issues related to lighting and glare, including monitors.

      SLO 12A.1.1.5 Discuss risk factors and treatments related to carpal tunnel syndrome.
- **Goal 2:** Demonstrate the identification, selection, use, and maintenance of **software**, **hardware**, **supplies**, and **equipment**.
  - **GLO 2.1:** Demonstrate the identification, selection, and use of **software**.
    - SLO 12A.2.1.1 Evaluate and select the most appropriate software for a specific project (i.e., WYSIWYG editor, CMS, game engine, code editor, graphic software, DBMS).

      SLO 12A.2.1.2 Select and use software to develop digital assets.
  - CLO 2 2. Demonstrate the identification colection use and
  - **GLO 2.2:** Demonstrate the identification, selection, use, and maintenance of **hardware**.
    - SLO 12A.2.2.1 Identify, select, use, and maintain hardware to develop digital assets.

- **GLO 2.3:** Demonstrate the identification, selection, use and maintenance of **supplies and equipment**.
  - SLO 12A.2.3.1 Identify, select, use, and maintain the supplies and equipment to develop digital assets.
- **Goal 3:** Incorporate **project management** processes throughout the development cycle.
  - **GLO 3.1: Document** the development process.
    - SLO 12A.3.1.1 Develop a formal documentation process for the project under development.
  - **GLO 3.2: Collaborate** with peers, teachers, and clients.
    - SLO 12A.3.2.1 Provide, request, and incorporate feedback from peers, teachers, and clients (i.e., student groups, sports teams, local business or industry).
  - **GLO 3.3: Assess** the project development process.
    - SLO 12A.3.3.1 Review and evaluate the project development process.
  - **GLO 3.4:** Incorporate **quality assurance** processes.
    - SLO 12A.3.4.1 Perform quality control on the assets (i.e., data redundancy, web safe, graphic design, optimization, uniformity).
- **Goal 4: Conceptualize** projects.
  - **GLO 4.1:** Discuss and incorporate interactive digital media development **theory**.
    - SLO 12A.4.1.1 Discuss the theory behind the project under development (i.e., colour theory, branding, game theory, programming concepts, business rules, data modelling, indexing, ERDs, normalization).
  - **GLO 4.2:** Explore and research **project ideas, audience, clients, and project requirements**.
    - SLO 12A.4.2.1 Demonstrate research skills.
    - SLO 12A.4.2.2 Demonstrate the ability to develop strategies to collect
    - SLO 12A.4.2.3 Demonstrate the ability to gather project requirements.

#### **GLO 4.3:** Assess, analyze, and select project **concept**.

SLO 12A.4.3.1 Using the project criteria, assess and select the most appropriate assets.

#### Goal 5: Plan projects.

#### **GLO 5.1:** Determine **scope**, **timeline**, and **milestones**.

SLO 12A.5.1.1 Determine scope, timeline, and milestones of the project under development.

### **GLO 5.2:** Develop **linear** and **non-linear stories**, **plans**, **and flowcharts**.

SLO 12A.5.2.1 Develop storyboards and mock-ups.

SLO 12A.5.2.2 Develop concept designs for assets (i.e., stage, character designs, storyboards, score compositions, 3D models, sprite sheet, data models, etc).

#### Goal 6: Develop projects.

#### **GLO 6.1:** Develop and test **prototypes**.

No applicable SLOs.

#### GLO 6.2: Create and incorporate assets.

SLO 12A.6.2.1 Create a library of assets (i.e., databases, animated 2D assets, animated 3D assets, rigged objects, animated characters, videos, motion graphics, foley art, scores, special effects, digital paintings) to be used in a project under development.

#### **GLO 6.3:** Use **code** to solve problems.

SLO 12A.6.3.1 Use code in asset development (i.e., actionscript, expressions, XML, SQL) for the project under development.

#### **GLO 6.4:** Evaluate and incorporate **security features**.

SLO 12A.6.4.1 Discuss potential security threats related to the theft and unauthorized use of assets.

SLO 12A.6.4.2 Create security features for assets (i.e., watermarking, copyrighting images, database security).

- **Goal 7: Publish, release or present, and assess** projects.
  - **GLO 7.1: Publish, release or present, and assess** projects.
    - SLO 12A.7.1.1 Publish asset to file format suitable for project under development.
    - SLO 12A.7.1.2 Demonstrate the ability to present project.
    - SLO 12A.7.1.3 Demonstrate the ability to assess completed projects.
- **Goal 8:** Describe and demonstrate the transferable **cross-curricular** knowledge and skills relevant to the interactive digital media industry.
  - **GLO 8.1: Read, interpret, and communicate** information.
    - SLO 12A.8.1.1 Incorporate story, plot, character development, and/or business requirements into asset development.
- **Goal 9:** Demonstrate awareness of **sustainability** as it pertains to interactive digital media development.
  - **GLO 9.1:** Describe the interactive digital media design industry's **sustainability** practices and impact on the environment.
    - SLO 12A.9.1.1 Discuss the lifespan of electronic devices, and its impact on electronic waste.
  - **GLO 9.2:** Describe the impact of **human sustainability** on the well-being of those employed in interactive digital media design and the users of their services.
    - SLO 12A.9.2.1 Discuss concerns related to hyper-connectivity.
  - **GLO 9.3:** Describe **sustainable business practices** within the interactive digital media design industry.
    - SLO 12A.9.3.1 Define and discuss the concept of sustainable business practices.
    - SLO 12A.9.3.2 Demonstrate awareness of the purpose of marketing, and the need to keep it current.

- **Goal 10:** Demonstrate awareness of the **ethical and legal standards** as they pertain to interactive digital media design.
  - **GLO 10.1:** Demonstrate awareness of the **ethical and legal standards** as they pertain to interactive digital media design.

SLO 12A.10.1.1	Demonstrate understanding of, and comply with, licensing agreements.
SLO 12A.10.1.2	Demonstrate understanding of, and comply with, copyright legislation as it pertains to digital assets.
SLO 12A.10.1.3	Discuss the importance of reading terms and user agreements.

#### Goal 11: Demonstrate employability skills.

#### **GLO 11.1:** Demonstrate **fundamental employability skills**.

SLO 12A.11.1.1	Demonstrate regular and punctual attendance.
SLO 12A.11.1.2	Demonstrate the ability to communicate respectfully and effectively with teachers, supervisors, co-workers, and students.
SLO 12A.11.1.3	Demonstrate accountability by taking responsibility for their actions.
SLO 12A.11.1.4	Demonstrate adaptability, initiative, and effort.
SLO 12A.11.1.5	Demonstrate teamwork skills.
SLO 12A.11.1.6	Demonstrate the ability to stay on task and effectively use time in class and work environments.
SLO 12A.11.1.7	Demonstrate the responsible use of technology.

## **GLO 11.2:** Demonstrate awareness of **cultural proficiency**, and its importance in the workplace.

SLO 12A.11.2.1	Discuss potentially sensitive or offensive images.
SLO 12A.11.2.2	Consider culture when creating or using assets (i.e.,
	colours, symbols, gestures, imagery).

## **GLO 11.3:** Demonstrate understanding of the **business operation** of an interactive digital media design organization.

No applicable SLOs.

#### **GLO 11.4:** Demonstrate **critical thinking skills**.

SLO 12A.11.4.1 Demonstrate critical thinking skills when solving problems.

- **Goal 12:** Demonstrate understanding of the **interactive digital media industry**.
  - **GLO 12.1:** Demonstrate understanding of the **scope** of the interactive digital media industry.
    - SLO 12A.12.1.1 Demonstrate understanding of scope of asset creation.
  - **GLO 12.2:** Demonstrate understanding of the **educational and career opportunities**, as well as **industry and professional associations**.
    - SLO 12A.12.2.1 Discuss career and educational opportunities in asset creation.
    - SLO 12A.12.2.2 Demonstrate awareness of professional associations and communities in asset creation.
  - **GLO 12.3:** Demonstrate understanding of **working conditions** in interactive digital media.
    - SLO 12A.12.3.1 Discuss the working conditions related to different occupations in interactive digital media.
- **Goal 13:** Demonstrate awareness of the **evolution**, **technological progression**, **and emerging trends** in interactive digital media.
  - **GLO 13.1:** Describe the **history, technological progression,** and **emerging trends** in interactive digital media.
    - SLO 12A.13.1.1 Discuss the history, technological progression, and emerging trends in asset creation.