

Welcome to Introduction to Digital Technology. **It is imperative that you share this information with your parents.** Open and honest communication between the school and home will help ensure your success in this course. This course is an introduction to digital technology, designed to expose you to different creative/technical options that you can expand on in higher grades. The units will have approximately equal time and weight in the course. This course also teaches computer and practical skills that will be valuable to students in their academic and professional careers. **PLEASE NOTE: It is very important to manage your time each day when working on projects.**

Topics To Be Covered:

1. Digital Artist
2. Motion Graphics Design
3. Web & Mobile UI Design
4. 2D Animation
5. 3D Modeling & Animation
6. App / Game Development (Actionscript & Unity)
7. Portfolio Development
8. High End Game Development (Unity/Unreal)

The Rules:

Computer rules at Sturgeon Heights are strictly enforced. **ANY** misuse or abuse of the Internet including accessing pornographic or violent material, normally objectionable material, sending threats, Spam, or any type of harassment via e-mail, will be dealt with quickly and severely. The St. James-Assiniboia School Division does not look lightly upon such behaviors. Consequences will include: suspension, loss of credit, expulsion etc. In some cases, Police and RCMP agencies may also intercede.

Attendance & Evaluation:

Students who **miss deadlines** will receive a score or ns (not submitted) until the work is submitted and graded (with late penalty). **Exceptionally late** work may not be accepted at all. Parents and Students will receive **periodic progress reports**.

5 Absences Email from the teacher advising that if absences continue, the student may be removed from the course.

10 Absences Parents and grade level admin will be notified of frequent absences at this point.

20 Absences Teacher & grade level admin will recommend removal from course at this point.

Teaching Methods:

- Presentations (for note taking)
- Demonstrations
- Creative Projects
- Class discussions
- In-class activities

Expectations:

My expectation of students in this course is that they always try to do their best work. Students who pay attention and work hard will ensure their success. Listening to instructions, working independently and using your creative imagination is all it takes!

Contact

SH phone: 888-0684
email: james.rogowy@sjasd.ca

Security:

Every student has an individual ID and Password. Like a bank PIN number, it is very private and chosen by the user. **DO NOT SHARE** this password with anyone. **Every Activity** on every computer at Sturgeon Heights Collegiate is **monitored, logged, and traceable**. All users are held accountable for their actions. There is no such thing as being anonymous when using a computer at Sturgeon Heights Collegiate.

Please note: parents may contact me with any questions about reference or resource materials.

Project 1	40%
Project 2	40%
Final Portfolio	20%

Requirements for Projects:

Digital Artist – *Required skills include hand drawn, pixel and vector art creation.*
Software Skills: Adobe Photoshop, Illustrator and InDesign (optional)

- *Choice of Original Artwork Comic Book (minimum 8 pages) or Children's Story Book (minimum 12 pages)*
- Concept Sheet / Statement of Intent
- Presentation of Concept & Storyboard
- Initial Sketches and Ideas
- Scanning and Digital Manipulation of Images
- Production of Final Images
- Layout of Final Product
- Printing and Binding of Final Piece for Portfolio

Motion Graphics – *Required skills include vector, pixel and typography art, principles of animation, sound edits and video composition & FX.*
Software Skills: Adobe Illustrator, Premiere and After Effects

- *Original Motion Graphics Video Production including Graphics & Typography with Video, Images and Sound/Music (minimum 5 minutes, HD quality)*
- Concept Sheet / Statement of Intent
- Presentation of Concept
- Recording of Required footage
- Color Correction and Grading of Video
- Creation of Vector and Typographic Elements
- Sound / Music Editing (if required)
- Final Editing and Render of Video

Web & Mobile UI Design – *Required skills include HTML, CSS, PHP, javascript, jQuery and Database (MySQL) coding experience.*
Software Skills: Komodo IDE, Cyberduck and Adobe Photoshop

- *Responsive Website Design for Customer of Choice. Must Include Fully Functional HTML & CSS as well as PHP Contact Page and 1 Advanced (ie. Login Window, Dropdowns, javascript) Feature. (minimum 8 pages)*
- Concept Sheet / Statement of Intent
- Presentation of Concept
- Development of Photoshop Layout Mockup
- Coding and Development of Main Pages
- Upload to Web Server for Testing
- Testing Responsiveness on Desktop and Mobile
- Confirmation of PHP Form Submission

2D Animation – *Required skills include hand drawn, pixel and vector art, principles of animation and sound edits.*
Software Skills: Adobe Animate, Photoshop & Illustrator

- *Creation of Original 2D Animation with Animation Principles, Walk Cycles and Lip Sync for Dialogue (minimum 5 minutes)*
- Concept Sheet / Statement of Intent
- Presentation of Concept & Storyboard
- Initial Sketches and Ideas and Character Sheets
- Scanning and Digital Manipulation of Images
- Development of Library Elements
- Animation Development
- Sound / Music Editing (if required)
- Final Editing and Render of Video

3D Modeling – *Required skills include advanced polygon mesh manipulation, UV texture mapping, lighting and rendering.*
Software Skills: Blender, Unity, Adobe Photoshop

- *Creation of Highly Detailed 3D Model and Scene*
- *Concept Sheet / Statement of Intent*
- *Presentation of Concept*
- *Initial Sketches and Ideas and Character Sheets*
- *Scanning and Digital Manipulation of Images*
- *Development of 3D Model*
- *Application of Material and UV Wrapped Textures*
- *Arrangement of Lights and Camera in Preparation for Final Render*
- *Final Render of Scene*
- *3D Print of Main Detailed Model*
- *Development of Low Poly Version (For Game Development) and Import into Unity.*

3D Animation – *Required skills include polygon mesh manipulation, UV texture mapping, lighting, keyframing and rendering.*
Software Skills: Blender, Adobe Photoshop

- *Creation of Original 3D Animation Video Production with Sound/Music (minimum 5 minutes)*
- *Concept Sheet / Statement of Intent*
- *Presentation of Concept & Storyboard*
- *Initial Sketches and Ideas and Character Sheets*
- *Scanning and Digital Manipulation of Images*
- *Sound / Music Editing (if required)*
- *Development of 3D Elements*
- *Application of Bone System for Animated Characters*
- *Application of Material and UV Wrapped Textures*
- *Arrangement of Lights and Cameras in Preparation for Animation*
- *Final Render of Animation Video*

App Development – *Required skills include pixel and vector art, principles of animation, Actionscript or Swift (optional) coding experience*
Software Skills: Adobe Photoshop, Animate, Illustrator, Apple Xcode (optional)

- *Creation of Complete Application for iOS Devices with Advanced Features (minimum 10 pages)*
- *Concept Sheet / Statement of Intent*
- *Presentation of Concept*
- *Initial Sketches on App Mockup Sheet*
- *Scanning and Digital Manipulation of Required Images*
- *Sound / Music Editing (if required)*
- *Coding and Testing of Application within Software*
- *Testing Application on Smartphone (iOS Preferred)*
- *Upload of Application to App Store for Public Download*

Game Development – *Required skills include vector and pixel artwork, Actionscript or C#, Javascript coding experience (optional)*
Software Skills: Adobe Photoshop, Animate, Unity (optional)

- *Creation of Original Playable 2D (Animate) or 3D (Unity) Game with Menu Screens, Sound FX & Music (minimum 5 levels)*
- *Concept Sheet / Statement of Intent*
- *Presentation of Concept*
- *Initial Sketches of Game Development*
- *Scanning and Digital Manipulation of Required Game Resources (Character Animations, Textures, Buttons)*
- *Sound / Music Editing (if required)*
- *Coding Game Elements (ie. Mechanics, User Feedback, Rules)*
- *Beta Testing Game Elements with Peers*
- *Release of Game to Entire Class for Feedback.*

DMD Portfolio Development – *Required skills include hand drawn, vector and pixel artwork, page layout & typography.*
Software Skills: Adobe Photoshop, Illustrator, InDesign (optional)

- *Development of RRC DMD Post-Secondary Entry Portfolio (Provided by RRC)*
- Concept Sheet / Statement of Intent
- Presentation of Concepts
- Initial Sketches and Designs
- Scanning and Digital Manipulation of Images
- Building of Required Elements
- Printing and Layout of Portfolio
- Presentation of Final Entrance Portfolio
- Submission of Portfolio to RRC

DMD40S Weekly Marking Rubric

0	1	2	3	4	5
<p><i>Student has not demonstrated any attempt to participate in any classwork.</i></p> <p><i>Student has not attended any classes during the course of the entire week.</i></p> <p><i>Student did not submit any weekly classwork or summary at all.</i></p> <p>Files: None</p> <p>Summary: None</p>	<p><i>Student has demonstrated very little effort in classwork.</i></p> <p><i>Student has attended very few (1-2) classes throughout the week.</i></p> <p><i>Student may have submitted weekly classwork and summary but the quality was poor and did not show evidence (No files and/or limited summary) of a full week of progress.</i></p> <p>Files: None</p> <p>Summary: Short sentence / Limited information.</p>	<p><i>Student has demonstrated a weak effort in classwork.</i></p> <p><i>Student has attended some (2-3) classes throughout the week.</i></p> <p><i>Student has submitted weekly classwork and summary but it showed little evidence (vague files and/or weak summary) of a full week of progress.</i></p> <p>Files: Vague screenshots / No visible progress</p> <p>Summary: Short sentences / Limited information.</p>	<p><i>Student has demonstrated some effort in classwork.</i></p> <p><i>Student has attended most (3-4) classes throughout the week.</i></p> <p><i>Student has submitted weekly classwork and summary and it showed some evidence (some files and summary) of a full week of progress.</i></p> <p>Files: Screenshots & files that show progress.</p> <p>Summary: Summary with some information.</p>	<p><i>Student has demonstrated good effort in classwork.</i></p> <p><i>Student has attended most (4-5) classes throughout the week.</i></p> <p><i>Student has submitted weekly classwork and summary and it showed decent evidence (files and detailed summary) of a full week of progress.</i></p> <p>Files: Files, screenshots and/or recordings that outline progress.</p> <p>Summary: Summary with decent information.</p>	<p><i>Student has demonstrated excellent effort in classwork.</i></p> <p><i>Student has attended all (5) classes throughout the week.</i></p> <p><i>Student has submitted weekly classwork and summary and it showed strong evidence (detailed files and summary) of a full week of progress.</i></p> <p>Files: Files, screenshots, and recordings that clearly outline progress.</p> <p>Summary: Summary with detailed information.</p>