CARSON GRAHAM SECONDARY

Middle Years Programme

COURSE OUTLINE – MYP YEAR 4 INFORMATION COMMUNICATION TECHNOLOGY

Course Overview:

Applied Design, Skills and Technologies 9 includes several project-based disciplines of study, of which Information and Communications Technologies (ICT) 9 is one option. While each ADST 9 option uses a different medium of study, all apply the Design Cycle as the core method to develop effective design solutions. Specific attention is paid to analyzing the essential qualities of a successful design solution in order to determine essential design criteria, developing a plan that will incorporate those criteria, creating the solution based upon that plan and then evaluating the effectiveness of the solution based upon those criteria.

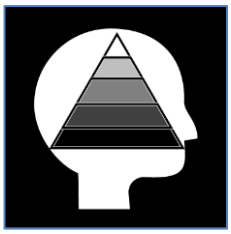
In ADST (ICT) 9, students create and manipulate digital graphics and images to fulfill intended purposes for defined audiences. In extension to what was learned in the Digital Literacy component of Designs 8 class, students will build upon the skills and understandings learned in with Adobe Photoshop. We also learn how to create visually effective vector graphics using Adobe Illustrator and sequence movement elements to create short 2D animations with Adobe Animate.

Throughout the course, we will address variety of issues related to good and safe digital citizenship, including ethical considerations relating to intellectual property and personal identity on the internet and methods to curate, access and share user-created files in a networked environment. Additionally, a focus of this course will be the potential social impact of graphic representations.

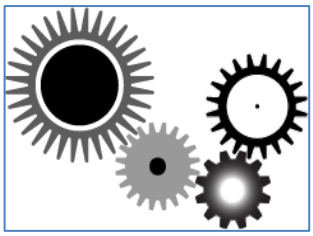
Learning:

Through engaging with this course, students should UNDERSTAND…

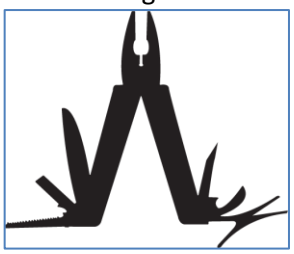
Social, ethical, and sustainability considerations impact design.



Complex tasks require the sequencing of skills.



Complex tasks require different technologies and tools at different stages.



Through engaging with this course, students will KNOW…

Statement of Inquiry	Concepts	Unit Title/Topic
The best design solutions respond effectively to the needs and expectations of the end user.	Key and Related Concepts: Development and Markets & Trends Global Contexts: Personal and Cultural Expression (Products)	Seeing is Believing: reworking digital images to meet a defined need.
Design decisions made for creative reasons have impacts (both intended and unintended) on distinct communities.	Key and Related Concepts: Communities and Perspective Global Contexts: Globalization and Sustainability (Diversity & Interconnection)	Graphics Have an Impact: how graphic representations are seen.
Human movements can be deconstructed and represented with a digital analogue.	Key and Related Concepts: Systems and Ergonomics Global Contexts: Scientific and Technical Innovation (Models)	Making It Move: representing human movement with digital analogues.

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Through engaging with this course, students will DO…

CURRICULAR COMPETENCIES CATEGORIES	EXAMPLES (Selected from Curricular Competencies)
Understanding Context	• Engage in research and empathetic observation in order to understand design opportunities • Concisely explain a Design Problem.
Defining	• Identify potential users and relevant contextual factors. • Identify criteria for success, intended impact, and any constraints. • Develop a Design Brief and Evaluation Criteria.
Ideating	• Take creative risks in generating ideas and add to others' ideas in ways that enhance them. • Screen ideas against criteria and constraints. • Critically analyze and prioritize competing factors, including social, ethical, and sustainability considerations, to meet community needs for preferred futures. • Choose an idea to pursue, keeping other potentially viable ideas open
Prototyping	• Develop a plan that includes key stages. • Prototype, making changes to design, strategies and procedures as needed.
Testing	• Test the first version of the design solution against developed criteria. • Gather peer and/or user feedback, then make changes to the design solution and test again.
Making	• Identify and use appropriate tools, technologies; source appropriate digital materials for the design solution. • Make a step-by-step plan for production and carry it out, making changes as needed. • Put into practice the development plan, incorporating the chosen design, strategies and procedures.
Sharing	• Demonstrate their product to an appropriate audience. • Critically evaluate the success of their product, and explain how their design ideas contribute to the individual, family, community, and/or environment. • Critically reflect on their design thinking and processes, and evaluate their ability to work effectively both as individuals and collaboratively in a group, including their ability to share and maintain an efficient co-operative work space. • Identify new design issues.

Through this course, students will develop the following Approaches to Learning skills…

Below are some examples of how we develop ATL skills in Design:

ATL Skill Category	Examples of Skills
Research skills	Gather information from design problem-specific inquiry and make relevant, detailed observations.
Thinking skills	Analyze observations and information gained from design problem-specific inquiry. Develop criteria to test potential design plans.
Social skills	Practice giving feedback on the design solutions with reference to established design-specific criteria; demonstrate academic integrity.
Communication skills	Use of appropriate text and graphic media to convey an intended message to a defined audience.
Self-management skills	Structure information appropriately for a given design project; use appropriate resources and available timeframe and supports to complete a design solution.

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Assessment:

Throughout this course, students will demonstrate their learning…

The MYP Design course will focus on developing skills related to 4 criteria based objectives.	Formative assessment is assessment ***as*** learning, or assessment ***for*** learning. **Formative assessments could include;**	Summative assessment is assessment ***of*** learning. **Summative assessments could include;**
A: Inquiring and Analyzing	Guided and informal inquiry exercises pursued individually, in pairs, small groups and as a full class.	Formal design inquiry and analysis
B: Developing Ideas	Guided and informal criteria development and ideation exercises pursued individually, in pairs, small groups and as a full class.	Formal written description of qualitative criteria for summative projects. Presentation of chosen design ideas through a 'product pitch'.
C: Creating the Solution	Multiple small 'practice projects' allowing students to practice the use of specific tools, techniques and strategies explained and demonstrated through direct instruction.	"Formal Photograph" project: Modifying a formally posed digital photograph to meet a fictitious customer's expectations. "Altered Reality" project: Manipulated digital photograph that causes the viewer to question the initial physical presumptions contained in the image. "Sophisticated Cartoon Character" project: Creation of an original, sophisticated cartoon character. "Dancing Stickman" project: Creation of an animation of a least 15 seconds in duration that reproduces the physical movements of a human through the analogue of a 'stick man'.
D: Evaluating	Guided and informal critiques of sample designs provided by the teacher and classmates.	Formal written critique of a student-designer's "design solution".

Academic Honesty and Personal Integrity

The faculty at Carson Graham expects our students to complete academic and nonacademic work that is authentic and respectful of intellectual property. All students are expected to adhere to the school's Policy for Academic Integrity. Ignorance of the standards related to academic honesty and student integrity is not an excuse for dishonesty, plagiarism and malpractice. You are expected to familiarize yourself with the policy.
https://www.sd44.ca/school/carson/About/schoolpolicies/Documents/Carson%20Graham%20Academic%20Honesty%20Policy%20reviewed%20December%202018.pdf

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Assessment Rubrics:

Grade 9

Criterion A: Inquiring and analysing

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **states** the need for a solution to a problem • **states** the findings of research.
3-4	• **outlines** the need for a solution to a problem • **states some** points of research needed to **develop** a solution, **with some guidance** • **states** the main features of an existing product that inspires a solution to the problem • **outlines some of** the main findings of research.
5-6	• **explains** the need for a solution to a problem • **states** and **prioritizes** the main points of research needed to **develop** a solution to the problem, **with some guidance** • **outlines** the main features of an existing product that inspires a solution to the problem • **outlines** the main findings of relevant research.
7-8	• **explains** and **justifies** the need for a solution to a problem • **states** and **prioritizes** the main points of research needed to **develop** a solution to the problem, **with minimal guidance** • **describes** the main features of an existing product that inspires a solution to the problem • **presents** the main findings of relevant research.

Criterion B: Developing ideas

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **states one** basic success criterion for a solution • **presents one** design idea, which can be interpreted by others • **creates** an incomplete planning drawing/diagram.
3-4	• **states a few** success criteria for the solution • **presents more than one** design idea, using an appropriate medium(s) or labels key features, which can be interpreted by others • **states** the key features of the chosen design • **creates** a planning drawing/diagram or **lists** requirements for the creation of the chosen solution.
5-6	• **develops a few** success criteria for the solution • **presents a few** feasible design ideas, using an appropriate medium(s) and labels key features, which can be interpreted by others • **presents** the chosen design **stating** the key features • **creates** a planning drawing/diagram and **lists** the main details for the creation of the chosen solution.
7-8	• **develops a list of** success criteria for the solution • **presents** feasible design ideas, using an appropriate medium(s) and outlines the key features, which can be correctly interpreted by others • **presents** the chosen design **describing** the key features • **creates** a planning drawing/diagram, which **outlines** the main details for making the chosen solution.

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Criterion C: Creating the solution

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **demonstrates approaching** technical skills when making the solution • **presented in an incomplete form**.
3-4	The student: • **lists** the main steps in a plan that contains the details to follow the plan to create the solution • **demonstrates good** technical skills when making the solution • **creates** the solution, which **partially** functions and is **adequately** presented. • **states more than one change** made to the chosen design **or** plan when making the solution.
5-6	The student: • **lists** the steps in a plan, which **considers** time and resources, resulting in peers being able to follow the plan to create the solution • **demonstrates competent** technical skills when making the solution • **creates** the solution, which functions **as intended** and is presented **appropriately** • **states one change** made to the chosen design **and** plan when making the solution.
7-8	The student: • **outlines** a plan, which **considers** the use of resources and time, sufficient for peers to be able to follow to create the solution • **demonstrates excellent** technical skills when making the solution • follows the plan to **create** the solution, which functions as **intended** and is presented **appropriately** • **explains changes** made to the chosen design and plan when making the solution.

Criterion D: Evaluating

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **describes** a testing method, which is used to measure the success of the solution • **states** the success of the solution.
3-4	The student: • **defines** a **relevant** testing **method**, which generates data, to measure the success of the solution • **states** the success of the solution against the design specification based on the results of **one relevant** test • **states one way** in which the solution could be improved • **states one way** in which the solution can impact the client/target audience.
5-6	The student: • **defines relevant** testing **methods**, which generate data, to measure the success of the solution • **states** the success of the solution against the design specification based on **relevant** product testing • **outlines one way** in which the solution could be improved • **outlines** the impact of the solution on the client/target audience, **with guidance**.
7-8	The student: • **outlines** testing methods used, which demonstrate the success of the solution • **outlines** the success of the solution against the design specification based on **authentic** product testing • **describes** how the solution could be improved • **outlines** the impact of the solution on the client/target audience.