Course Outline

School Name: Keewaytinook Internet High School	
Department Name: Technological Education	
Ministry of Education Course Title: *Communications Technology*	
Grade Level: *10*	
Ministry Course Code: *TGJ20*	

Teacher's Name: Linda Johnson
Developed by: Linda Johnson   Date: February 2010

Revision Date: September 2017

Developed from: The Ontario Curriculum, Grades 9 and 10, Technological Education, 2009

Profile Name: Public Profile, Communications Technology, Grade 10, Open

Text:

Prerequisite: None

Credits: One

Length: 110 hours

Principal's Name: Kevin Dempsey

Principal's Approval (signature)   _____

Approval Date:

Course Description

This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print and graphic communications, photography, and interactive new media and animation. Student projects will include computer-based activities such as creating videos, editing photos, working with audio, cartooning, developing animations, and designing web pages. Students will also develop an awareness of environmental and societal issues related to communications technology, and will explore secondary and post-secondary education and training pathways and career opportunities in the various communications technology fields.

Overall Curriculum Expectations

A. **Communications Technology Fundamentals**
- demonstrate an understanding of the core concepts, techniques, and skills required to produce a range of communications media products or services;
- demonstrate an understanding of technical terminology, basic scientific concepts, and mathematical concepts used in communications technology and apply them to the creation of media products;
- demonstrate an understanding of and apply the interpersonal and communication skills necessary to work effectively in a team setting.

B. **Communications Technology Skills**
- apply project management techniques to the planning and development of communications media products;
- apply a design process or other problem-solving processes to meet a range of challenges in communications technology;
- create products or productions that demonstrate competence in the application of creative and technical skills.

C. **Technology, the Environment, and Society**
- describe the impact of communications media technologies and activities on the environment and identify ways of reducing their harmful effects;
- demonstrate an understanding of social effects and issues arising from the use of communications media technologies and the importance of representing cultural and social diversity in media productions.

D. **Professional Practice and Career Opportunities**
- demonstrate an understanding of and apply safe work practices in communications technology activities;
- identify career opportunities in communications technology and demonstrate an understanding of the skills, work habits, education, and training required for entry into postsecondary programs or employment in these fields.

Course Content

Unit	Length
Graphic Design and Production – Personal Stationery, Package Design/DVD or CD Case and Printing Processes/Photo-Direct and Transfer Methods of Screen Printing	13 hours
Short Audio-Video Production – Flip Camera Video (Self-Portrait, Culture and Community) Video. Video Biography with still images and audio	28 hours
Short Animations - Animated text and 2D Original story/Cartoon	28 hours
Information Displays, Environments, Ethics, Health and Safety, and Careers – Interactive Presentation, Web page with Audio and Flash Animation Introduction	13 hours
Image Production and Processes – Pinhole Camera Principles of Photography and Imaging, Studio Shooting and Lighting, and Photo Collage	28 hours
Total	110 hours

Unit Descriptions

Unit 1: Graphic Design and Production
This unit introduces students to the technology required to communicate graphically through desktop-publishing systems and software, print production methods, and specialty printing. Students learn and apply design elements and principles by creating thumbnail sketches, rough sketches, comprehensive layouts, and camera-ready artwork to produce printed materials. Safety, print media influences, careers, and educational planning are explored.

Unit 2: Short Audio-Video Production
This unit introduces students to the processes of audio-video pre-production, production, and post-production. Students learn basic shot sizes, camera movements, and special effects to create a story-board and to script audio-video material. Students compose and capture images, edit audio-video footage, and apply finishing operations before presenting the production to an audience. The safe and careful handling of sensitive equipment is emphasized. Students learn to apply ethical standards and policies in their productions while exploring further education and career opportunities.

Unit 3: Short Animations
This unit introduces students to the fundamental principles of computer-generated animation. Students develop scripts, prepare storyboards, construct or model images, and edit animations and output for different applications. They study and apply composition, 2-D and 3-D modeling, and editing techniques to create animated, short films. Students

apply ethical standards and policies in their productions while exploring further education and career opportunities.

Unit 4: Information Displays and Environments
Students plan and produce environments for information displays using a variety of software, hardware, and physical materials. Students create display spaces and employ electronic resources in the production, presentation, and distribution of information. Students apply ethical standards and policies in their productions as they explore further education and career opportunities.

Unit 5: Image Production and Processes
Students apply the elements and principles of photography in developing techniques to capture, manipulate, and edit images. Exploration of traditional black and white, 35 mm, pinhole, light-sensitive paper (mediums) and colour digital photography. Students learn basic optic principles, technical terminology, lighting techniques, and production processes to safely generate final photographic images. They discover how the camera captures images and how light is controlled in studio and natural settings. Students apply ethical standards and policies in their productions while exploring further education and career opportunities.

Teaching/Learning Strategies
This course is organized into an eight-week series of lessons and activities presented via the internet to students living in remote northern Ontario communities. The eight week term will be used for course consolidation, review and the final examination wherein a variety of strategies will be used in the online delivery of this course. Such instruction strategies will include the following:

- *Braingstorming* – online group generation of initial ideas expressed without criticism or analysis
- *Buddy System* – links students for peer/cross age support
- *Case Study* – investigation of real and simulated issues
- *Collaborative/Co-operative Learning* – small online and classroom group learning providing high levels of student engagement and interdependence
- *Computer-Assisted Learning* – learning new materials or review/reinforce materials previously learned
- *Video Conferencing/Discussion* – student-to-student discussion and teacher-to-student conferencing to encourage confidence and motivation to success in all learners
- *Design Process* – the stages of development of a product or process, including developing a focus, developing a framework, choosing the best solution, implementing a plan, and reflecting on the process and the product
- *Independent Study* – exploration and research of a topic interesting to students
- *eJournal Writing* – the practice of expressing ideas, experiences, questions, reflections, personal understanding, or new learning in written form on regular basis
- *Problem-Solving Strategies* – helps students work though problems
- *Problem-Solving* – model for helping students to identify and work through problems
- *Report/Presentation* – oral (Breeze Online), visual, and written presentation of researched topic to class or in community
- *Research* – model of investigation (Breeze Online session or Video Conferencing)
- *Socratic Lesson* – oral presentation (Breeze Online, Video Conferencing or by Video Presentation)

Learning Goals

Learning goals will be provided to each student at the beginning of each project, which will include a success criteria. Assessment Tools will include:

- Portfolio (digitally generated);
- Critical Analysis Process;
- Oral Presentation (recorded on video live from community and submitted and/or presented in person in video conference broadcasts to all communities, including student participation via synchronized internet chat and blogs sessions);
- Research process by documenting and recording findings;
- Student Self-Assessment (strategies to understand criteria such as specific skills; peer assessment and personal reflections on the technical process);
- Rubrics, marking schemes and anecdotal comments with suggestions for improvements.

Evaluation

The final grade will be determined as follows (Ontario Ministry of Education, 2010):

- Seventy per cent of the grade will be based on evaluation conducted throughout the course. This portion of the grade should reflect the student's most consistent level of achievement throughout the course, although special consideration should be given to more recent evidence of achievement.
- Thirty per cent of the grade will be based on a final evaluation administered at or towards the end of the course. This evaluation will be based on evidence from one or a combination of the following: an examination, a performance, an essay, and/or another method of evaluation suitable to the course content. The final evaluation allows the student an opportunity to demonstrate comprehensive achievement of the overall expectations for the course (p. 47).

Ontario Ministry of Education. (2010). *Growing success: Assessment, evaluation and reporting in Ontario schools.* Toronto ON: Queen's Printer for Ontario.

Type of assessment	Category	Details	Weighting (%)
Term Work (70%)	**Knowledge/ Understanding**	Identify and describe the techniques used to produce print media. Identify and describe the basic techniques required to produce animations and audio-video productions. Identify and describe the processes of capturing still images. Describe printing and finishing processes. Demonstrate understanding of electronic communication equipment. Describe various video recording techniques.	**16**
	Thinking	Explain the benefits, risks, and ethics associated with communications technology. Identify career opportunities in the communications field.	**16**
	Communication	Prepare camera-ready artwork for print and post-production. Identify strengths and weaknesses of graphic, electronic, and live communications. Outline the procedures required to create audio-video, audio, and animated productions. Outline the steps used to edit audio-video, audio, and animated productions.	**19**
	Application	Produce audio-video and/or animated productions. Compose, capture, and process still images. Use computer graphics software competently. Create various effects using video and digital camera techniques. Edit audio-video and/or animated productions. Observe the safety rules and regulations. Apply health and safety standard when using products and materials.	**19**
Final Evaluation (30%)	**Culminating Activity (20%)**	**Knowledge/Understanding**	**4**
		Thinking	**4**
		Communication	**6**
		Application	**6**
	Final Examination (10%)	**Knowledge/Understanding**	**2**
		Thinking	**2**
		Communication	**3**
		Application	**3**
		TOTAL	**100%**

Assessment/Evaluation Strategies

Students will be assessed and evaluated through a variety of methods, strategies and tools where are required as appropriate to the expectation being assessed. Such tools include diagnostic, formative and summative evaluations set out within the course activities within each unit.

Assessment information is obtained through a variety of means, including the following:

- Peer feedback on blog responses
- Ongoing descriptive feedback, including descriptive feedback on students' preliminary version of their opinion essay
- Small-group conversations to develop their opinions and communication skills
- eJournal
- ePortfolio
- Online Blogs
- Self-assessment used to revise media projects and communications
- Observations of student's web design presentation
- Conversations with student on a regular basis (synchronous and asynchronous)

Evidence of student achievement is collected from various sources, including the following:
- Observation of individual contribution in a group role-playing activity
- Ongoing observations of most consistent work as to skill and knowledge of a variety of programs with consideration given to most recent work
- Conversation about student's eportfolio, including discussions about their growth and skill in technology, and areas for improvement
- Media presentation expressing an opinion
- Media communication projects (animation, audio and video presentations)
- Communication and Technology Presentation and Portfolio
- Final exam

Resources:
- Ontario Ministry of Education. (2017). *The Journey Together: Ontario's Commitment to Reconciliation with Indigenous Peoples.* Retrieved from http://ontario.ca/page/journey-together-ontarios-commitment-reconciliation-indegenous-peoples
- Ontario Ministry of Education. (2016). Ontario Schools, Kindergarten to Grade 12: Policy and Program Requirements. Retrieved from http://edu.gov.on.ca/eng/document/policy/os/index.html
- Ontario Ministry of Education. (2010)*. Growing success: Assessment, evaluation and reporting in Ontario schools.* Toronto, ON: Queen's Printer for Ontario.

Other key resources (software, texts, websites, etc)

Software	
Macromedia Dreamweaver	Adobe Photoshop Elements
Macromedia Fireworks	Microsoft Paint
GoldWave	Microsoft Windows Photo Story 3
Microsoft Office	Corel Presentations
(Excel, Word, Publishing,	Word Perfect
Slide Presentations)	OpenOffice
Windows Media Movie Maker	Google (Doc, Drive, etc.)

Websites:
Graphic design and production
http://www.desktoppublishing.com/linkus.html
http://www.NewsletterOnline.com
Image Production

http://www.mirrorimage.com
http://www.t-shirtshopper.com
http://www.sasked.gov.sk.ca/curr_content/paasurvey/entre/Lsn/ygent.htm
Short Audio – Video productions
http://www.videonics.com
http://www.videosystems.com
Web technologies and animation
http://www.macromedia.com
http://www.webmonkey.com
Pinhole camera
http://www.pinhole.com/resources/mirror
http://www.kodak.com

Program Planning

This version of TGJ2O is offered to Indigenous students living in isolated northern First Nation communities, which do not have access to the usual high school facilities, amenities and equipment associated with standard secondary education.

The course is uniquely tailored to the KiHS program in part, as many of the units require use of computer software and computer access time, both of which are provided. The course makes use Internet for some instruction, direction and research. Where applicable, the course attempts to make use of the computer equipment and resources available, to provide a practical experience.

As the course is related to many fields of work in the computer and media industry, where appropriate, reference will be made to opportunities and trends that currently exist in the workplace. This is done through Internet research with reference to software and course material that is covered.

Students may also receive support from various programs at KiHS, including the First Nation Student Success Program and the Special Education Program.

Indigenous and local content is used throughout the course to meet students' learning needs. Considerations are made to the learning preferences of the student population and lessons can be adjusted for individual students as required.