

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 2015

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
- B. Communications Technology Skills
- C. Technology, the Environment, and Society
- D. Professional Practice and Career Opportunities

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	22 hours
Short Audio-Video Production – Flip Camera Video (Self-Portrait, Culture and Community) Video. Video Biography with still images and audio	22 hours
Short Animations - Animated text and 2D Original story/Cartoon	22 hours
Information Displays, Environments, Ethics, Health and Safety, and Careers – Interactive Presentation, Web page with Audio and Flash Animation Introduction	22 hours
Image Production and Processes – Pinhole Camera Principles of Photography and Imaging, Studio Shooting and Lighting, and Photo Collage	22 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 storyboard 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

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

Journal 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 through 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)

Assessment/Evaluation Techniques

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.

Final Evaluations

- internet and online tests, quizzes;
- digital portfolio presentations;
- student organizing presentation;
- formal presentations (video including audio statement featuring their specific communities);
- video conferencing.

The assessment plan will include the following:

Personal Communication

- weekly journal/portfolio;
- self/peer assessment;
- student-teacher conferences via video conferences and webcam sessions;
- ongoing verbal feedback;
- critique (record reflections on experiences, plans for improvements, recommendations for changes).

Teacher Observation

- formal/informal.

Performance Assessment

- research project assigned work;
- assigned technological applications;
- portfolio entries;
- presentation.

Accommodation

- working with a partner, peer helper
- ongoing feedback

- use of computers, Internet
- viewing activities, oral responses for testing, taped if necessary
- additional time
- use of scribe/translator
- use of specialized tools, materials
- modifications of expectations, IEP; Individual Education Plan
- offering alternative assignments
- extra time for assignments, both gifted and learning-disabled students

Special Note

Teachers are expected to be acquainted with students' Individual Education Plans (IEPs) and the unique learning characteristics of their individual students and to make the necessary accommodations.

Evaluation

The student's final grade for this course will be determined as outlined in Program Planning and Assessment 2009 (p.26).

- Seventy per cent (70%) of the grade will be based on evaluations conducted throughout this course. This portion of the grade should reflect the students' *most consistent level of achievement* throughout the course, although special consideration should be given to the more recent evidence of achievement.
- Thirty per cent (30%) of the grade will be based on a final evaluation in the form of an examination, performance, essay and / or other method of evaluation suitable to the course content and administered towards the end of the course.

Type of assessment	Category	Details		Weighting (%)
Formative (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/Inquiry	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
Summative (30%)	Culminating Activity (20%)	Produce animations of a logo to be used in a web page to promote local community. Brochure and digital images are to be used.	K/U	4%
			T/I	4%
			C	6%
			A	6%
	Final Examination (10%)	Written examination designed to cover the overall expectations of the course.	K/U	2%
			T/I	2%
			C	3%
			A	3%
TOTAL				100%

Assessment/Evaluation Strategies

Students will be assessed and evaluated through activities which focus on: paper and pencil; performance assessment; and personal communication.

The four major categories of assessment/evaluation will be incorporated into the design of the various assessment strategies used in the course, as illustrated in the following table.

Knowledge/Understanding	Thinking/Inquiry	Communication	Application/Making Connections
Quizzes, online (internet) tests, Matching columns, Short answer, Essays, written exams (open-ended), digital organizers (tables, graphs, charts), Communication Technology journals, Question and answer by discussion online forum	Tests and examinations (open-ended questioning), Essays, Research, Creation of communication products and displays, Self evaluation	Open-ended questions - tests, exams, essays, organizers (webs), essays, creation of communication products and displays	Open-ended questions allowing for knowledge to be applied to a new situation/problem. Essays, Design projects portfolio, Rubrics, Computer programs, Creation of communication products and displays

Resources listed in Bibliographical style

Name of approved text book: *No official prescribed text book being used.*

Growing Success, Assessment, Evaluation, and Reporting in Ontario Schools (*First Edition*), 2010

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

- **Software**

Macromedia Dreamweaver

Macromedia Fireworks

GoldWave

Microsoft Office

(Excel, Word, Publishing,

Slide Presentations)

Windows Media Movie Maker

Adobe PhotoshopElements

Microsoft Paint

Microsoft Windows Photo Story 3

Corel Presentations

Word Perfect

OpenOffice 3.0

Picasa 3.8

- **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 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 of the 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.