

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:

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

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

Text: Communication Technology (Today and Tomorrow). Sanders, M. McGraw-Hill, 2000

Prerequisite: None

Credits: One

Length: 110 hours

Principal's Name: Darrin Potter

Principal's Approval (signature) _____

Approval Date:

Course Description/rationale

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 may 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

- 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.
- 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.
- 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.
- 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 – <i>Personal Stationery, Package Design/DVD or CD Case and Printing Processes/Photo-Direct and Transfer Methods of Screen Printing</i>	22 hours
Short Audio-Video Production – <i>Chase Video and Video Biography with still images</i>	22 hours
Short Animations - <i>Animated text and 2D Original story/Cartoon</i>	22 hours
Information Displays and Environments – <i>Interactive Presentation, Web page with Audio and Flash Animation Introduction</i>	22 hours
Image Production and Processes – <i>Pinhole Camera Principles of Photography and Imaging, Studio Shooting and Lighting, and Photo Collage</i>	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 (Illuminate Online), visual, and written presentation of researched topic to class or in community

Research – model of investigation

Socratic Lesson – oral presentation (Illuminate Online)

Evaluation

The student's final grade for this course will be determined as outlined in Program Planning and Assessment 2000 (p.15).

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	<ul style="list-style-type: none"> -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. 		13
	Thinking/ Inquiry	<ul style="list-style-type: none"> – explain the benefits, risks, and ethics associated with communications technology - identify career opportunities in the communications field 		19
	Communication	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> – 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 (15%)	Produce animations of a logo to be used in a web page to promote local community. Brochure and digital images are to be used.	Knowledge/ Understanding	3%
			Thinking/Inquiry	3%
			Communication	4%
			Application	5%
	Final Examination (15%)	Written examination designed to cover the overall expectations of the course.	Knowledge/ Understanding	4%
			Thinking/Inquiry	4%
			Communication	4%
			Application	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, Paper and pencil tests, Matching columns, Short answer, Essays, written exams (open-ended), organizers (tables, graphs, charts), Communication Technology journals, Question and answer by discussion board	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.*

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

- **Software**

Macromedia Dreamweaver

Macromedia Fireworks

GoldWave

UleadVideo

Pinnacle Studio

OpenOffice 2.0

Adobe Photoshop

Microsoft Paint

Microsoft Windows Photo Story 3

Corel Presentations

Word Perfect

- **Websites:**

Graphic design and production

<http://www.desktoppublishing.com/linkus.html>

<http://www.NewsletterOnline.com>

Silk screening

<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 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.