

Course Outline

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| 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: Mikail-Kaii Newby

Developed by: Linda Johnson Date: February 2010

Revision Date: September 2021

Developed from:

Ontario Ministry of Education. (2009). *The Ontario curriculum, grades 9 and 10: Technological education*. Queen's Printer for Ontario.

Text: None

Prerequisite: None

Credits: One

Length: 110 hours

Principal's Name: Angela Batsford-Mermans

Principal's Approval: 

Approval Date: September 8, 2021

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 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

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.

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.

Daily Living Skills

- Demonstrate an understanding of effective decision-making processes and their role in independent living;
- Explain and demonstrate the use of basic money-management skills and techniques needed to manage personal financial resources effectively;
- Describe and demonstrate the use of basic principles and techniques of effective household management.

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.

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 |
|--|---------------|
| 1. Graphic Design and Production – Personal Stationery, Package Design/DVD or CD Case and | 13 hours |

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| Printing Processes/Photo-Direct and Transfer Methods of Screen Printing | |
| 2. Short Audio-Video Production – Flip Camera Video (Self-Portrait, Culture and Community) Video. Video Biography with still images and audio | 28 hours |
| 3. Short Animations - Animated text and 2D Original story/Cartoon | 28 hours |
| 4. Information Displays, Environments, Ethics, Health and Safety, and Careers – Interactive Presentation, Web page with Audio and Animation Introduction | 13 hours |
| 5. 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 that is presented to students in remote northern communities via the internet. The eighth week is used for course consolidation, review, and the final examination. Teacher and students communicate over the internet through timely activity feedback, emails, messages, video and audio calls. Classroom mentors assume the role of liaison between the teacher and student while also supporting a holistic approach to motivate, engage and support each individual student.

A variety of strategies will be used in the online delivery of this course. Some instructional strategies include:

- Brainstorming – 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/Cooperative 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 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)

Learning goals will be discussed at the beginning of each assignment and success criteria will be provided to students. The success criteria are used to develop the assessment tools in this course, including rubrics and checklists.

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 percent 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. 41).

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 standards when using products and materials. | 19 |
| Final Evaluation (30%) | Culminating Activity (20%) | Knowledge/Understanding | 4 |
| | | Thinking | 4 |
| | | Communication | 6 |
| | | Application | 6 |
| | Exam (10%) | Knowledge/Understanding | 2 |
| | | Thinking | 2 |
| | | Communication | 3 |
| | | Application | 3 |
| TOTAL | | | 100 |

Assessment/Evaluation Strategies

A variety of assessment and evaluation methods, strategies and tools are required as appropriate to the expectation being assessed. These include diagnostic, formative, and summative within the course and within each unit.

Assessment *for* learning and assessment *as* learning 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 (assessment of learning) 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

The Ministry of Education's 2010 document, *Growing Success*, outlines the seven fundamental principles that guide best practice in the assessment and evaluation of students. KiHS teachers use practices that:

- are fair, transparent, and equitable for all students;
- support all students, including those with special education needs, those who are learning the language of instruction (English or French), and those who are First Nation, Métis, or Inuit;
- are carefully planned to relate to the curriculum expectations and learning goals and, as much as possible, to the interests, learning styles and preferences, needs, and experiences of all students;
- are communicated clearly to students and parents at the beginning of the course and at other points throughout the school year or course;
- are ongoing, varied in nature, and administered over a period of time to provide multiple opportunities for students to demonstrate the full range of their learning;
- provide ongoing descriptive feedback that is clear, specific, meaningful, and timely to support improved learning and achievement;
- develop students' self-assessment skills to enable them to assess their own learning, set specific goals, and plan next steps for their learning (p.6).

Resources

First Nations Technology Council. (n.d.). Home. <http://technologycouncil.ca/>

Government of Ontario. (2016). The journey together: Ontario's commitment to reconciliation with Indigenous Peoples. <https://www.ontario.ca/page/journey-together-ontarios-commitment-reconciliation-indigenous-peoples>

Indigenous Innovation. (n.d.) Social innovation through Indigenous technology. <https://www.animikii.com/>

MyBlueprint. (2017). *MyBlueprint education planner*. www.myblueprint.ca

Ontario Ministry of Education. (n.d.). *Indigenous education strategy*. <http://www.edu.gov.on.ca/eng/aboriginal/>

Ontario Ministry of Education. (2009). *The Ontario curriculum, grades 9 and 10: Technological education*.

<http://www.edu.gov.on.ca/eng/curriculum/secondary/teched910curr09.pdf>

Ontario Ministry of Education. (2010). *Growing success: Assessment, evaluation and reporting in Ontario schools*. <http://www.edu.gov.on.ca/eng/policyfunding/growSuccess.pdf>

Ontario Ministry of Education. (2016). *Ontario schools, kindergarten to grade 12: Policy and program requirements*. <http://edu.gov.on.ca/eng/document/policy/os/index.html>

Toulouse, P.R. (2016). What matters in Indigenous education: Implementing a vision committed to holism, diversity and engagement. <https://peopleforeducation.ca/wp-content/uploads/2017/07/MWM-What-Matters-in-Indigenous-Education.pdf>

Program Planning

This course is offered to Indigenous students living in isolated, northern Ontario communities. It is offered by qualified teachers in a blended classroom with a balance of academic, wellness, land-based learning, local language and culture to support the success of the whole student. This course uses the internet for instruction, demonstration and research. It utilizes a student-centered semi-virtual classroom which capitalizes on the strengths of internet program delivery to minimize the disadvantages of geographic remoteness.

Students are presented with 1320 minutes of instruction/activity via the internet over the period of one week. All lessons, assignments, questions and course material is presented in this manner, with approved print materials available as a student resource in each classroom. The student and instructor communicate via the internet, while a classroom mentor (a fully qualified teacher) assists students in completing tasks in a timely manner and provides support as required.

Indigenous and local content is used throughout the course to meet students' learning needs. Opportunities for outdoor activities and land-based learning are also incorporated and students are encouraged to use local knowledge in their products. Considerations are made to the learning preferences of the student population and lessons can be adjusted for individual students as required. 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. Opportunities have been provided for students to apply ideas and concepts encountered in this course to their lives as an individual and as a member of a First Nations community. Teachers consult the Ontario Ministry of Education policies, guidelines and important initiatives when planning a comprehensive program in this area.