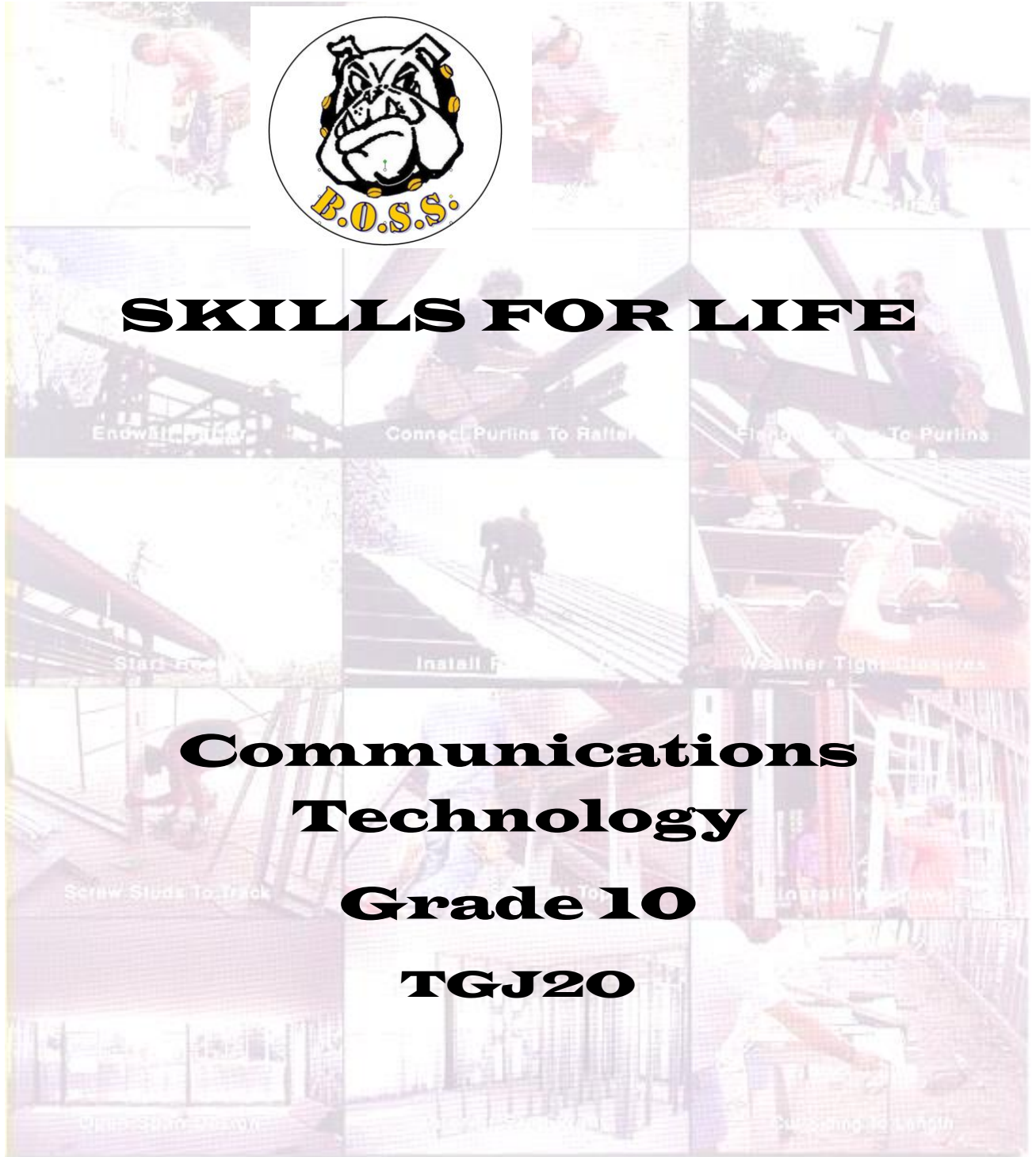# Bur Oak Secondary School

SKILLS FOR LIFE

Communications Technology
Grade 10
TGJ20

Course Overview

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 postsecondary education and training pathways and career opportunities in the various communications technology fields..

OVER ALL EXPECTATIONS:

A. COMMUNICATIONS TECHNOLOGY FUNDAMENTALS

A1. demonstrate an understanding of the core concepts, techniques, and skills required to produce a range of communications media products or services;

A2. 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;

A3. demonstrate an understanding of and apply the interpersonal and communication skills necessary to work effectively in a team setting.

B. COMMUNICATIONS TECHNOLOGY SKILLS

B1. apply project management techniques to the planning and development of communications media products;

B2. apply a design process or other problem-solving processes to meet a range of challenges in communications technology;

B3. create products or productions that demonstrate competence in the application of creative and technical skills.

TECHNOLOGY,THE ENVIRONMENT, AND SOCIETY

C1. describe the impact of communications media technologies and activities on the environment and identify ways of reducing their harmful effects;

C2. 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

D1. demonstrate an understanding of and apply safe work practices in communications technology activities;

D2. 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.

Unit 1	Safety & The Communications Design Process
Unit 2	Graphic Design and Production
Unit 3	Audio Production
Unit 4	Video Production – Music Video
Unit 5	Image Production and Processes – Portrait Photography
Unit 6	Technology, the Environment and Society – ISU research

LEARNING SKILLS

In addition to the specific skills that are developed throughout the course, students learn to:

- solve problems through careful analysis, cooperation and communication;

- develop individual and group skills through student-centred activities;

- develop time-management skills to design and follow organizational plans to complete a range of tasks;

- show commitment to a task by maintaining a level of effort required to complete a product;

- develop the ability to self-monitor progress using record-keeping and tracking procedures such as logs, journals and project portfolios.

SAFE AND APPROPRIATE USE OF EQUIPMENT AND FACILITIES

Students are expected to adhere safety/censorship on the Internet by following School Board Policies relating to appropriate student use and access to Internet services.

EQUIPMENT REQUIREMENTS

The units in this course profile rely upon the availability of a wide range of computer and audio/visual equipment. Students are expected at all times to use all equipment with utmost care. "Horseplaying" and careless use of equipment can result in you not getting to use the equipment. All students are responsible for putting away equipment after use. You are required to report all equipment misuse or damage immediately to your teacher. Any student who through acts of misuse causes damage to any equipment will be required to pay for all repair and or replacement costs.

SAFE AND APPROPRIATE USE OF EQUIPMENT AND FACILITIES

Teachers address safety/censorship on the Internet by implementing School Board Policies relating to appropriate student use and access to Internet services.

Assessment/Evaluation Techniques

Methods of assessment and evaluation include a wide variety of approaches to enhance the learning environment. Assessment methods may include: performance assessments such as project deliverables and skill demonstrations; personal communication assessment such as instructional questions and answers, conferences, classroom discussions, journals, or log books; and standardized tests such as classroom tests or examinations. Self- and peer assessment assist the student by providing directions to improve performance. Assessment charts included in each activity provide the basis for teacher evaluation rubrics, student self-assessment, or team assessment tools.

Assessment and evaluation tasks may include:

- composition of design briefs (research and analysis);

- composition of design proposals;

- technical and/or design reports;

- research reports (including photos of product in use);

- drawings, illustrations, and/or blueprints;

- finished models, prototypes, test models, and products;

- presentations;

- competition deliverables;

- daily log or work journal.

EVALUATION:

Once the preliminary theory has been taught regarding the project introduction and theory surrounding this course. The course will be student directed by 80%. In the case of team assignments, the group will organize and plan their time to execute required assignments. Students will evaluate their personal work, and the work of their colleagues. The teacher will evaluate final product and work skills on all assignments, presentations and exams

Unless otherwise noted, evaluation will take the form a four level system as provided by the Ministry of Education:

- **Level 1**   **- 50 - 59%**   **- Limited** effort in relating: Knowledge, Thinking/ Inquiry, Communication and Application

- **Level 2**   **- 60 - 69%**   **- Moderate** effort in relating: Knowledge, Thinking/ Inquiry, Communication and Application

- **Level 3**   **- 70 - 79%**   **- Considerable** effort in relating: Knowledge, Thinking/ Inquiry, Communication and Application

- **Level 4**   **- 80 - 100%**   **- High Degree** of effort in relating: Knowledge, Thinking/ Inquiry, Communication and Application

An evaluation sheet with clear assignment instructions, due dates, and evaluation scheme will accompany all assignments. Grades will be based upon the following:

- **Practical Projects Application**   **17.5 %**

    - Includes research, design, fabrication, safety and the final product

    - Individual & Team based assignments

- **Thinking & Inquiry**   **17.5%**

    - Includes various assignments (research, short answer, text questions, essay etc.) tests (to

    assess theoretical & practical aptitude) and technology portfolio (notebook) and

    Independent Study Unit.

- **Knowledge & Understanding**   **17.5%**

  - Includes working habits, organizational skills, participation in class lessons, co-operation

  with others, teamwork, professionalism, self - management, completion of daily work logs,

  general attitude towards class.

- **Communication**   **17.5%**

  -    Activity exercises, presentations

- **Portfolio, Summative and Final Evaluation**   **30%**

  The Portfolio, Summative and Final evaluation for the course occurs near the end of the semester and accounts for 30% of the students over-all mark for the course. In this course the Summative evaluation consists of a practical challenge and the presentation of a portfolio that effectively communicates the student's abilities, knowledge and thinking skills in this subject.

LAB AND CLASSROOM POLICY:

- **Attendance:**

  Students who are absent for part or all of a class may suffer in the evaluation process.   Students are responsible for work covered during any absence and can expect to be evaluated on all work in the course. Students with unauthorized absences will be given a mark of zero on evaluations. Persistent absence may place the student in jeopardy of losing the credit.

  Sometimes absences from class are unavoidable.   It is the student's responsibility to find out what they have missed.   Encourage students to get two learning partners.

- **Partner System:**

  It is highly recommended that all students pair up with a class partner. This should be someone who is responsible and who will regularly attend class. If a student is absent or late for class, this partner will pick up notes, homework, and be able to update the student about all class lessons & events. It is the responsibility of each student to be aware of all that is occurring in the class.

- **Late Assignments:**

  All assignments must be handed in on time.   Since "Process" is as important as "Product" incomplete work should still be handed in on the due date and will be assessed using the same Rubrics. It may not be possible to work on parts of your projects at home. Some projects are a group effort. It is, therefore, very important that you attend every day. Limited opportunity may be available in class for catching up. The lab may be available, by appointment before and after school.

  Missed Summative Evaluations

(Tests, Assignments, Performance Activities)

Teachers will clearly identify the summative evaluations that will be used to arrive at a final grade. **It is the responsibility of students** to provide evidence of learning by preparing, completing, and submitting each summative activity within the prescribed timeframe. When no evidence of achievement has been provided by the student, a mark of zero will be assigned. To minimize missed opportunities for demonstration of learning, students must inform teachers, in advance, of any planned absence (field trip, sporting event) in order that alternate arrangements can be made. Students who skip summative evaluations will receive a mark of a zero. **Assignments/tests will not be accepted or written after the teacher takes up the solution with the class.**

Group Work

- When students complete a project as a group, all students in the group will not necessarily get the same mark.

- Various strategies will be used to assess the contributions of the Group members such as: work sharing statements, teacher interviews, individual portfolios, and observations.

Tests & Quizzes

Students will be given one week's notice for all tests and quizzes. Students who miss a test or quiz may be given a mark of zero without a valid reason for their absence. Students may not write a previously administered test or quiz.

Bonus or Makeup Assignment

The Tech Department does not offer students bonus marks or makeup assignments to boost their marks.

Ethics & Honesty:

This policy is based upon two issues:

1. Any **plagiarism**, copying of student work or academic dishonesty will **result in a grade of zero for the perpetrator and possibly the originator**. **School administration and parents will be notified.**

2. Any work that is produced within this course is expected to contain positive images of race, gender, language and religion. References to drugs, alcohol, or profanity in a video or in musical accompaniment is unacceptable. **Negative stereotypes, acts of violence, sexual themes, or the use of profanity in your work is unacceptable and will result in a mark of zero.**

3. Tech courses are practical courses where students develop and apply their skills**. Teachers will continuously assess student skills and provide guidance and feedback.** Students must get their teacher's approval before completing any work at home. Any work completed at home without the teacher's approval will not be assessed.

Students are responsible for:
- providing evidence of their achievement
- demonstrating academic honesty

- completing work to the best of their ability
- submitting work to teachers on time
- attending classes and being active participants in the learning and assessment process
- communicating with teachers when there is difficulty in meeting timelines
- ensuring that missed work is completed within pre-established timelines
- communicating with parents assessment & evaluation methods, and pertinent due dates and timelines for work submission.

Lab Policies:

- Please do not bring any coats or knapsacks into the class, leave them in your lockers.

- Absolutely no food or drinks in class

- Never adjust hardware, peripheral devices or software on any equipment, unless authorized by the teacher.

- Save all materials to your student folders, or on a disk. Internet is for academic use only.

- Remember, if you do not use class equipment properly, you may not be able to complete your work.

- As per the BOSS student handbook, No communication devices are to be played on school property without the authorization of the teacher. Tape and CD players, Gameboy(s) or the like, cell phones, pagers etc. are not permitted at all and may be confiscated at the school's discretion.

- All students are required to adhere to the following at all times in the Construction Shop:

    - Wear safety glasses at all times

    - Wear only closed toed shoes

    - Wear Hard Hats

    - Remove all jewellery

    - Tuck in clothes and roll up long sleeves

    - Follow all safety rules.

    - Do not be under-dressed

    - Be ready, prepared, alert

STUDENT CONDUCT AGREEMENT

SAFETY AWARENESS

PERSONAL PROTECTIVE EQUIPMENT [PPE]
1. Avoid wearing loose, baggy clothing or personal accessories, such as watches, chains, rings, or other jewellery, or ties. **Students wearing shorts, sweaters, high heels or sandals will not be permitted in the shop. No backpacks/book bags are allowed in the shop.**

2. Wear safety glasses, shields and gloves and other PPE as per instructed.

3. Long hair is to be tied back away from the face.

LIFT SUPPORT AND MOVEMENT
1. Move a heavy load only with teacher approval.

2. Use assistance to lift items over 20 kilograms (40 pounds) or two metres (six feet) in length,

3. Secure and support heavy and long loads with approved stands only.

4. Lift properly, legs not back.

MACHINE TOOLS AND ENERGY
1. Do not direct compressed air or gases towards anyone or towards exposed skin or clothing.

2. Operate equipment, tools or machinery only after receiving proper instruction and permission from the teacher. A valid passport to safety must be in effect.

3. Never leave equipment or machinery running unattended.

4. Do not attempt to repair any electrical or mechanical connections.

5. Lockout any equipment which is being repaired.

6. Lockout and tag any equipment prior to repairs.

7. Notify the teacher if you suspect any hazards on or around the machine

STORAGE AND HANDLING OF COMPRESSED GASES
1. Complete WHMIS, symbols and recognition instruction.

2. Maintain all cylinders in an upright position, chained and secured with valve caps installed

3. Change gas bottles only with teacher supervision.

STORAGE AND HANDLING OF CHEMICAL SUBSTANCES
1. Understand and follow WHMIS, and MSDS instruction before handling chemical substances.

2. Secure all flammable and corrosives in approved cabinets.

3. Maintain good housekeeping practices when dealing with chemical substances.

WASTE DISPOSAL AND RECYCLING

1. Be responsible for cleaning up workstations, tools and the shops.

2. Sort waste by category as required using approved containers.

3. Sort recyclable liquids and solids into proper approved storage containers

STUDENT CONDUCT AGREEMENT

I, _____ **agree to:**

ENSURE A SAFE WORKPLACE

1. Inform teachers of all injuries, damaged tools, and potentially dangerous situations.

2. Make sure I know all fire exits and power shutdown switches and how to use them during emergency situations.

3. Not compromise the safety of others through horseplay or aggressive action.

4. Only use equipment when properly trained, always with any necessary personal protective equipment, and when I fully understand all related safety issues

5. Ask for assistance from the teacher when I am unsure of the proper procedures or health and safety issues

PRESCRIBED AND NON-PRESCRIBED MEDICATIONS

1. Report any use of prescription medications and inform teachers of any possible side effects of the medication [e.g. penicillin, Phenobarbital etc.]

2. Report any use of non-prescription medication and any possible side effects of the medication [e.g. Reactine, Benadril, any cough syrups etc.]

3. Never enter a shop or lab carrying, or under the influence of illegal substances

CONSEQUENCES FOR IMPROPER ACTION injury

I understand that failure to comply with this agreement may result in injury to me or others and that failing to comply with safety procedures may result in my temporary removal from the class or shop.

Does the above mentioned student have any health problems which could contribute to an accident in this course? If so, please give details:

_____

_____

I have read the above and understand the expectations and consequences.

Student's signature: _____   Date: _____

Parent's signature _____   Date: _____

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Engineering Log Sheet

STUDENT: _____ COURSE: _____

Date	Hours	Project	Activity Performed	Teacher Signature
Total Hours		Student Signature/date: Instructor Signature/date:		

Design Report Format

The Design Report consists of the following:

1. **Title Page**

   The title page is used to grab the attention of the reader. As such, it should contain some form of illustration that appeals to the reader. It should also contain the name of the report, the name(s) of the person(s) who produced the report, for whom the report has been prepared, and the date of production.

2. **Problem Statement**

   The problem statement describes the identified needs and situation of the project at hand. This statement is very brief (approximately one or two sentences).

3. **Design Criteria**

   This section outlines the set of factors that influence the design (e.g., cost considerations, size limitations, user requirements, material, or component properties, etc.). This section guides the design. It may be in point form, but as much detail as known should be here.

4. **Procedure Notes**

   This is an in-depth account of the process used in the design and fabrication of the product. The sentences in each paragraph should be kept short and to the point. It describes the route used to determine the solution to the design challenge, including research conducted, sources of information, modelling and testing of ideas and their results.

5. **Materials**

   List all the materials and costs used in the fabrication of the final product.

6. **Drawings or Illustrations**

   Include all drawings or illustrations that were used in the development and fabrication of the project. This includes rough sketches, technical drawings, illustrations, and/or photographs of models or products. Ensure all drawings are properly labelled and descriptive.

7. Conclusion

Describe the results of the process of finding a solution to the design challenge. Include the results of testing solutions. Include a description on how each of the design criteria was met (or not). Describe possible improvements or modifications for future work. Suggest other users or situations that may benefit from your research and/or testing.

8. References

List all reference materials used to complete the project, including books, articles, interviews, and Internet sources.

9. Log Sheet

From your daily log records, list the dates and number of hours taken for each facet of the project.