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**Information and Communication Technology:** (BTA3O)  
**The Digital Environment, Grade 11, Open**

This course prepares students for the digital environment. Using a hands-on approach, students will further develop information and communication technology skills through the use of common business software applications. The concept and operation of e-business will be explored, and students will design and create an e-business website. The skills developed in this course will prepare students for success in the workplace and/or postsecondary studies.

**Prerequisite:** None

## Digital Literacy

### Overall Expectations

By the end of this course, students will:

- describe the computer workstation environment, using proper terminology;
- apply appropriate strategies when organizing and managing electronic files and folders;
- demonstrate effective use of tools and techniques of electronic research.

### Specific Expectations

#### *The Computer Workstation*

By the end of this course, students will:

- explain the functions of the components of a computer and its peripheral devices (e.g., ports, motherboard, drives, memory, scanner, microphone);
- identify features and benefits of a networked environment;
- identify the advantages and disadvantages of networking computers in a variety of settings (e.g., home, office, school, small business, corporation);
- identify and compare a variety of operating systems (e.g., Windows, Mac OS, UNIX, Linux);
- describe the functions of common user interface elements (e.g., icons, menus, toolbars).

#### *File Management*

By the end of this course, students will:

- identify different strategies (e.g., backing up files regularly, organizing commonly used websites using the favourites/bookmarks list, using descriptive folder names) for organizing and managing electronic information (e.g., files, e-mail messages and addresses, websites);

- organize files and folders in a logical manner, using appropriate naming conventions;
- identify and access appropriate drives to facilitate data storage, data management, and retrieval.

#### *Electronic Research*

By the end of this course, students will:

- identify and describe the types of electronic sources that can be used for research (e.g., websites, CD-ROMs, databases);
- explain efficient search techniques that can be used to locate relevant information (e.g., metasearch, Boolean search, advanced search, natural language search);
- use efficient search techniques to research and solve business-related tasks and problems (e.g., checking facts and figures, locating contact information, looking for career opportunities);
- evaluate information collected from electronic sources for usefulness, accuracy, validity, bias, appropriateness, currency;
- use an accepted citation format (e.g., MLA, APA) to acknowledge electronic sources.

## Productivity Software

### Overall Expectations

By the end of this course, students will:

- demonstrate the use of advanced features of word processing software to produce common business documents;
- demonstrate the ability to use advanced features of spreadsheet software to perform a variety of tasks;
- manage information, using database software;
- demonstrate the ability to use the features of a variety of design software applications to perform specific tasks.

### Specific Expectations

#### *Word Processing*

By the end of this course, students will:

- use word processing software to create properly structured and formatted business documents (e.g., business correspondence, reports, mailing labels, newsletters);
- use advanced word processing features (e.g., columns, tables, language tools, mail merge, styles, images) to perform specific tasks efficiently;
- use support tools and features (e.g., wizards, manuals, online help features, tutorials) to enhance their word processing skills.

#### *Spreadsheet*

By the end of this course, students will:

- use spreadsheet software features (e.g., format, link, sort, chart) and functions (e.g., financial, logical) to perform specific tasks;
- manipulate data, using spreadsheet software, to complete a variety of tasks (e.g., budgeting, balance sheet, inventory, payroll, amortization);
- use support tools and features (e.g., wizards, manuals, online help features, tutorials) to enhance their spreadsheet skills.

#### *Database*

By the end of this course, students will:

- use database software features (e.g., range query, complex query, sort) to locate and organize information;
- use database software features to help perform common business tasks (e.g., create forms, do mail merge, create mailing labels);
- analyse data in a database (e.g., generate reports, interpret reports).

#### *Design Software*

By the end of this course, students will:

- demonstrate the effective use of design software (e.g., graphic, presentation, desktop publishing, graphic organizer software);
- select the appropriate software application to complete a variety of tasks associated with designing business documents (e.g., graphic editing, file conversion);
- import and export data (e.g., text, sound, video, images) between applications;
- use advanced features of design software to create business documents (e.g., business card, flyer, application form, brochure, poster) that meet accepted standards.

## Business Communications

### Overall Expectations

By the end of this course, students will:

- communicate using accepted business standards and formats;
- demonstrate effective use of electronic communication tools;
- create a digital portfolio illustrating their information and communication technology competencies and skills.

### Specific Expectations

#### *Business Communications Standards*

By the end of this course, students will:

- compose, edit, and revise business documents and communications to ensure they reflect accepted business standards;
- apply effective oral and visual business communication techniques;
- collaborate with peers, using a variety of methods (e.g., electronic, face-to-face), to develop and enhance business communications, and recognize how collaboration can improve productivity.

#### *Electronic Communication*

By the end of this course, students will:

- compare a variety of electronic communication tools (e.g., e-mail, voice mail, fax, personal digital assistant [PDA], cell phone, pager) in terms of their uses and their benefits to business;

- use electronic tools appropriately to communicate with others;
- use appropriate etiquette consistently when communicating electronically.

#### *Digital Portfolio*

By the end of this course, students will:

- describe essential interpersonal, employability, and technical skills an individual needs to work in a business environment;
- assess and analyse their personal competencies and skills in information and communication technology;
- create and maintain a digital portfolio of exemplary work that illustrates their competencies and skills in information and communication technology.

## E-Business

### Overall Expectations

By the end of this course, students will:

- demonstrate an understanding of e-business concepts and operations;
- evaluate the impact of e-business;
- design and create an e-business website for a target audience.

### Specific Expectations

#### *E-Business Concepts and Operations*

By the end of this course, students will:

- define key terms associated with conducting business online (e.g., e-business, e-commerce, click-and-mortar, B2B, e-tailers);
- describe the process and identify costs involved in setting up a business presence online (e.g., domain name registration, web host provider, payment gateway);
- analyse the components of an effective e-business site.

#### *The Impact of E-Business*

By the end of this course, students will:

- identify advantages and disadvantages of e-business from a consumer and a business perspective;
- describe ways in which e-business has changed conditions of employment (e.g., hours of work, interpersonal relationships, equipment);
- assess financial implications of purchasing online (e.g., exchange rates, shipping and handling, taxes and duties).

#### *E-Business Website*

By the end of this course, students will:

- identify the purpose (e.g., business presence, online ordering, marketing/promotion) and target audience for their e-business website;
- design the layout and navigation structure for their e-business website, following accepted guidelines (e.g., usability, placement);
- use web development tools to create an e-business website appropriate for the target audience (e.g., appropriate and inclusive content, images, and language).

## Information and Communication Technology Ethics and Issues

### Overall Expectations

By the end of this course, students will:

- demonstrate an understanding of the legal, social, and ethical issues related to information and communication technology;
- analyse privacy and security issues related to conducting business electronically;
- summarize health and environmental issues related to the use of information and communication technology.

### Specific Expectations

#### *Legal, Social, and Ethical Issues*

By the end of this course, students will:

- describe the impact on business of the illegal and unethical use of information and communication technology;
- describe the legal issues related to intellectual property law (e.g., copyright, trademarks, domain names);
- adhere to copyright and licensing rules and regulations when accessing information electronically;
- assess the purpose and content of an acceptable use agreement;
- describe the social and ethical issues related to the use of information and communication technology in business (e.g., equity and access issues, use of spyware, employee monitoring, sale of customer information).

#### *Privacy and Security Issues*

By the end of this course, students will:

- explain the reasons for protecting information and computer systems, and the methods of protection (e.g., passwords, firewalls, login, anti-virus software) used in stand-alone and networked environments;

- describe privacy and security issues (e.g., cybercrime, loss of privacy, identity theft, viruses) related to the use of information and communication technology tools;
- identify the security measures that e-businesses provide for consumers (e.g., encryption of credit card information, passwords, user identification).

#### *Health and Environmental Issues*

By the end of this course, students will:

- explain the importance of ergonomic practices in business;
- describe methods to ensure personal health and safety in an information and communication technology environment;
- explain how information and communication technology procedures and practices can be more environmentally friendly (e.g., disposal of materials, use of environmentally friendly materials).