

*Catholic District School Board Writing Partnership*

# Course Profile

## **Information Technology Applications in Business**

Grade 11

Open

BTA30

- *for teachers by teachers*

This sample course of study was prepared for teachers to use in meeting local classroom needs, as appropriate. This is not a mandated approach to the teaching of the course. It may be used in its entirety, in part, or adapted.

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Course Profiles are professional development materials designed to help teachers implement the new Grade 11 secondary school curriculum. These materials were created by writing partnerships of school boards and subject associations. The development of these resources was funded by the Ontario Ministry of Education. This document reflects the views of the developers and not necessarily those of the Ministry. Permission is given to reproduce these materials for any purpose except profit. Teachers are also encouraged to amend, revise, edit, cut, paste, and otherwise adapt this material for educational purposes.

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Catholic District School Board Writing Team – Information Technology Applications in Business

Lead Board

London District Catholic School Board

Project Manager

Bob Baran

Catholic Course Profile Writing Team

Bob Baran, London Catholic District School Board (Lead Writer)

Jim Delaney, London Catholic District School Board

Linda Vandeven, London Catholic District School Board

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## Course Overview

# Information Technology Applications in Business Grade 11, Open, BTA30

## Course Description

This course provides students with the opportunity to develop the information technology skills and knowledge required in a business. Students learn about the information technology work environment, use industry-standard software, conduct electronic research, investigate electronic business, and explore occupations and postsecondary programs that require information technology skills (*Business Studies, Grades 11-12* p. 59).

Everyday life for employees, students, consumers, savers, investors, managers, and entrepreneurs is changing and becoming more complex. Although rapid changes in information technology have an impact on all aspects of life, the operations of business are particularly affected. The information technology courses aim to prepare students for a business and communication world that relies more and more on electronic technology, technology that changes at a rapid pace. Whether students wish to apply the new technologies in their careers in the workplace to develop a broad understanding of the effects of technology on business, or to establish a foundation for the use of information technology at the postsecondary level, the information technology courses will provide opportunities to develop relevant skills and knowledge. In this course, there is a focus on the development of advanced levels of IT competence that would be relevant in the production of realistic business documents.

There are very few aspects of any business that are not affected by information technology; very few businesses offer any employment opportunities that do not have the expectation of employee IT competence. Additionally, the use of technology in business has become so important that in a survey asking for the most disastrous event that could happen to a business, the most frequent response was the loss of working computer infrastructure and the company data, even more disastrous than a major natural disaster wreaking havoc on resources. Since the vast majority of students will be employed by current businesses or establish their own businesses with IT requirements, it is important that they be prepared with IT skills.

It is even more important that students be aware of the pressing issues of human dignity, human rights, and democratic social systems that are overlooked by many businesses. These are integral parts of the process of building God's Kingdom in the here-and-now and our students must be cognizant of these issues and be encouraged to implement them into a developing socially responsible information technology environment.

This course is designed with the philosophy that the instruction of applications and communications should be integrated into all the units of the course. As a result, applications do not exist as a separate unit and communication is a component of virtually all the units presented. Obviously then, the course is centred on developing skill levels that emphasises the use and implementation of these tools in a Catholic and caring manner. At the end of the course, students are exposed to a series of activities which involves the development of a collection of student work and the development of a personal career portfolio to demonstrate their advanced IT business competencies.

The unit focused on is Security/Ethics. In any Catholic profile, the implementation of Catholic curriculum expectations is crucial. Catholicity across the curriculum should be a major aim of any Catholic curriculum profile. This unit provides an excellent opportunity to give examples of how these Catholic expectations can be implemented into the curriculum for this business course.

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## Prior Knowledge & Skills

Students are expected to have some prior keyboarding experience. Students who have not had this experience could be referred for extra help (peer tutors, student mentors). Appropriate software can be used by students needing additional keyboarding practice. Students should be familiar with the operating system used on the school network and the efficient use of a computer mouse. Students who do not have this prior knowledge will also require some remediation. Some word-processing skills are required, such as basic formatting, editing, and saving.

## How This Course Supports the Ontario Catholic School Graduate Expectations

In Pope John Paul II's World Communications Day Statement (1989) he stated:

“With the advent of computer telecommunications and what are known as computer participation systems, the Church is offered further means for fulfilling her mission. Methods of facilitating communication and dialogue among her own members can strengthen the bonds of unity between them. Immediate access to information makes it possible for her to deepen her dialogue with the contemporary world.”

Surely we must be grateful for the new technology which enables us to store information in vast man-made artificial memories, thus providing wide and instant access to the knowledge which is our human heritage, to the Church's teaching and tradition, the words of Sacred Scripture, the counsels of the great masters of spirituality, the history and traditions of the local churches, of religious orders and lay institutes, and to the ideas and experiences of initiators and innovators whose insights bear constant witness to the faithful presence in our midst of a loving Father who brings out of His treasure new things and old.

Young people especially are rapidly adapting to the computer culture and its “language.” This is surely a cause for satisfaction. Let us “trust the young.” They have had the advantage of growing up with the new developments, and it will be their duty to employ these new instruments for a wider and more intense dialogue among all the diverse races and classes who share this “shrinking globe.”

It falls to them to search out ways in which the new systems of data conservation and exchange can be used to assist in promoting greater universal justice, greater respect for human rights, a healthy development for all individuals and peoples, and the freedoms essential for a fully human life.

Whether we are young or old, let us rise to the challenge of new discoveries and technologies by bringing to them a moral vision rooted in our religious faith, in our respect for the human person, and our commitment to transform the world in accordance with God's plan.

The purpose of the Information Technology Applications in Business course in the Catholic faith community is to enable young adults to develop and utilize their gifts and resources to find solutions and implement technology in a way that models Gospel values. The focus of the curriculum is to enable students to become critical and innovative problem solvers who question the use of resources and understand the implications of technological innovations. An emphasis on process as well as results ensures that students apply skills and knowledge to provide services that recognize our God-given responsibility to respect the dignity and value of the individual and the protection of the environment.

## Units: Titles and Times

Unit 1	Business Workstation	22.5 hours
* Unit 2	Security/Ethics	26.25 hours
Unit 3	Global E-Business	35 hours
Unit 4	Careers	13.75 hours
Unit 5	An Office Experience	12.5 hours

\* This unit is fully developed in this Course Profile.

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## Unit Overviews

### Unit 1: Business Workstation

**Time:** 22.5 hours

#### Unit Description

Students become familiar with an information technology work environment. In Activity 1, they learn about the physical components of a business workstation. The function of hardware components and peripheral devices are described. An awareness of how outdated equipment impacts on business planning and operations is developed.

In Activity 2, students are introduced to the elements of a computer desktop. Electronic file management, organization of data and computer files, use of folders, bookmarks, electronic arrangement of files in folders, time-management techniques, and quality of work are stressed. Different processes for managing electronic data are discussed.

In Activity 3, students are introduced to the topic of ergonomics. They describe the characteristics of an ergonomically correct workstation, summarize health and safety issues related to the use of information technology, and assess emerging ergonomic practices in business. In light of Catholic social justice teachings, students evaluate workstations to ensure the physical well-being of employees. Students learn electronic research techniques using various Internet query options (e.g., use of Boolean key words, strings, etc.). Using a word processor and graphics, students research and report on controversial ergonomics issues in work environments (e.g., repetitive stress injury, eye strain, electromagnetic emissions, etc.).

In Activity 4, common business software applications are introduced. Students explain the function of the components of a computerized work environment, assess emerging hardware and software practices in business (using magazine articles or guest speakers), learn the use of software features that facilitate the joint production of business documents, determine the appropriate software applications required to create particular business documents and produce correctly formatted documents. Students use spreadsheets to create a price performance comparison of different hardware systems and software packages. A report summarizing their recommendations is generated using a word processor.

In Activity 5, students become acquainted with information technology infrastructures. Students describe the benefits of networks versus stand-alones in business environments. They learn to communicate with others in an appropriate and secure manner using electronic tools such as e-mail.

Summative evaluation: Students, in a group setting, present their findings on one topic in this unit using presentation software and/or webpage design.

#### Unit Overview Chart

Act.	Time	Expectations	Assessment	Focus
1	150 min	IIV.02, III.01, III.03C GE2a, 2b, 2d, 3c, 4b, 4f, 5g	Knowledge/Understanding Communication Application	The Physical Components
2	150 min	SI2.03, SI3.01, SI3.02, SI1.03, SI3.03, III.04, III.05, SIV.03, SI1.01 CGE2b, 2c, 2d, 3c, 4b, 4f	Knowledge/Understanding Thinking/Inquiry Application	The Computer Desktop
3	150 min	II2.02, II3.05, SI1.02C GE2b, 2c, 2d, 2e, 3b, 3c, 3d, 3f, 4a, 4d, 4f, 4g, 7e	Knowledge/Understanding Communication Application	Ergonomics
4	150 min	II2.01, SIV.01, SIV.02, SI1.02, SI1.04, SI1.05, SI2.01, SI2.02 CGE2a, 2b, 2c, 3b, 3c, 4f, 5a, 5e, 5f, 5g	Application Knowledge/Understanding Communication	Common Business Software

5	150 min	IIV.01, EB2.01, ER3.05, ERV.03, II1.02 CGE1d, 2b, 2c, 3b, 4f, 7a, 7b, 7i	Communication Thinking/Inquiry Knowledge/Understanding	Networks and the Internet
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## Unit 2: Security/Ethics

**Time:** 26.25 hours

### Unit Description

Students learn about security policies and procedures involving network passwords, encryption, viruses, and hacking. Students research computer user policies and then develop their own list of rules for computer etiquette. Interpersonal and cultural considerations are explored using web pals. Freedom of information (FOI) and privacy issues both on networks and the Internet are focused on. The teachings of the Catholic Church regarding ethics, bias, and inclusion are the focus for the discussion of the ethical use of resources in a business environment and for the issues of copyright and plagiarism. Group work, a debate, and slide presentation formats are used to share research results.

### Unit Overview Chart

Act.	Time	Expectations	Assessment	Focus
1	150 min	IIV.03, EBV.02, SIV.03, II2.03, II3.04, EB2.01 CGE2b, 3c, 4e, 5e, 7a, 7b	Application Thinking/Inquiry	Security Policies and Procedures
2	300 min	IIV.03, EBV.02, SIV.01, ERV.01, II3.03, SI1.01, SI1.03 CGE1d, 2a, 3c, 3d, 3f, 4f, 5e, 7a, 7b, 7i	Application Knowledge/Understanding Communication Thinking/Inquiry	Ethical Use of Resources
3	225 min	IIV.03 ERV.01 ERV.03, II2.04, II3.01, SI1.01, ER3.03, ER3.05, ERV.03 CGE1d, 2a, 2b, 2c, 2d, 3b, 3c, 4a, 4f, 5e, 5g, 7a, 7b, 7e	Communication Application Knowledge/Understanding Communication	Netiquette
4	600 min	IIV.03, II3.02, EB2.03, ER2.03, ER3.02, ER2.01, ERV.01, ERV.02, ERV.03, SIV.01, SIV.02, SI1.04 CGE1d, 2b, 2c, 3c, 3d, 3f, 4a, 4f, 5e, 7a	Communication Thinking/Inquiry Application Knowledge/Understanding	Security of Information (FOI, Privacy)
5	300 min	IIV.03, ERV.01, ER2.02, EB2.02, SI2.03 CGE1d, 2b, 2c, 3c, 3d, 4b, 4f, 5g	Thinking/Inquiry Knowledge/Understanding	Copyright, Plagiarism, Software Piracy

## Unit 3: Global E-Business

**Time:** 35 hours

### Unit Description

In Activity 1, the concept of global e-business is introduced using the lecture method. In Activity 2, the topic of operation of an e-business is explored, as is the topic of resources required to run an e-business. Students collect pricing information for Individual Service Providers from the Internet. Using a spreadsheet, students summarize the costs and report on the advantages and disadvantages of each Internet Service Provider.

In Activity 3, students explore the concept of e-business by browsing e-business webpages, consulting with webpage developers (i.e., using co-op, job-shadowing contacts) and completing a checklist of observed characteristics to determine the practices used in effective websites (i.e., financial/stock market, commercial sites). Students individually create a database using common fields specified by the teacher. Students identify one favourite website in three of the following six categories (primary data): education, entertainment, business/industry, reference, travel, and technical. Students include the website address and description (50 words or less). Individual databases are sent to the teacher for compilation. The teacher differentiates between primary data (original data created by the student) and secondary data (data acquired from other students in class). The teacher distributes the merged database (secondary data) to students who evaluate the sites on a scale of one to five under the following criteria: graphics, content, educational value, objectivity, and validity. Students send the evaluated database file back to the teacher who merges the individual databases again. The database now should have in excess of one thousand records to manipulate. Students select and sort data and perform calculations to produce a report to answer questions such as: Which website has the highest overall rating? Which website scores the highest in each of the categories? Which website has the highest rating for validity? Which website appears most frequently in the database? In Activity 4, students research and develop a small webpage advertising a hypothetical product of their choice. In Activity 5, students revise and summarize the criteria for evaluating and validating websites in light of the teachings of the Catholic Church with special consideration given to social impact, economic impact, bias, and inclusion issues related to e-business. Students produce a larger e-business webpage, which follows the final criteria. This webpage incorporates graphics obtained using a digital camera or created in graphics software applications. (The webpage concept may differ from the initial webpage or be similar to the first webpage depending on the proficiency of the individual student.) Peer and self-evaluation of student webpages occurs.

#### Unit Overview Chart

Act.	Time	Expectations	Assessment	Focus
1	75 min	EBV.01, ER3.01, ER3.05, EB1.01, SI1.01, SIV.03 CGE2a, 2b, 3b, 4f	Knowledge/Understanding Application	What Is E-Business?
2	150 min	ER1.05, ER1.01, EB1.02, EB1.03, EBV.01, ER3.04 CGE2a, 2b	Knowledge/Understanding Communication Thinking/Inquiry	How Does It Work and What Resources Are Needed?
3	750 min	ER1.02, ER2.01, EB1.04, SI2.01, SI2.02, SIV.02 CGE1d, 2b, 2c, 2d, 2e, 3b, 3c, 3d, 3f, 4f, 5g, 7e	Thinking/Inquiry Application Knowledge/Understanding	Evaluation of E-Business Sites
4	600 min	ER1.03, ER1.04, ERV.01, ERV.03, SI2.03, EB3.05, SI1.03 CGE2b, 2c, 3b, 3c, 4b, 4f	Application Thinking/Inquiry Communication Knowledge/Understanding	Electronic Research and Webpage Development
5	525 min	EB3.01, EB3.02, EBV.02, EBV.03, EB3.03, EB3.04, II3.02 CGE1d, 2a, 2b, 2e, 3d, 3f, 4a, 7a, 7e, 7f	Knowledge/Understanding Thinking/Inquiry Communication	The Economic and Social Impacts of E-business

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## Unit 4: Careers

**Time:** 13.75 hours

### Unit Description

In Activity 1, students explore career databases available at the school level. Electronic research is conducted into postsecondary options relating to computer/business careers. Students report on careers using word-processing or presentation software. In Activity 2, students search for and evaluate skills inventory sites. Students self-administer two or more different skills inventories for comparison. Contacts can be made with co-op instructors, employers, or guest speakers to give feedback and direction on the suitability of student resumes and cover letters. In Activity 3, resume writing and self-marketing are discussed with students who select and create a self-promotion technique. The technique includes a resume, cover letters, and resume/application distribution strategies. Students develop cover letters and envelopes using merges and macros for return addresses. The form cover letter and resume will become an initial component of the student's personal career portfolio.

### Unit Overview Chart

Act.	Time	Expectations	Assessment	Focus
1	300 min	PEV.01, PE1.02, PE1.03, PE1.04, ERV.03, ER1.03, ER3.05, SIV.03, SI2.03 CGE2b, 2c	Knowledge/Understanding Communication Application	Career Research
2	225 min	PEV.02, PE2.01, PE2.02, SI1.01, SI2.01, SI2.02 CGE2b, 4g	Knowledge/Understanding Application	Skills Inventory Resources
3	300 min	PEV.03, PE1.01, PE2.03, PE2.04, PE3.01, PE3.02, PE3.03, SI1.03, SIV.02 CGE2b, 2c, 4a, 4b, 4e, 4f, 4g, 5g, 5h	Thinking/Inquiry Communication Application	The Job Search Process

## Unit 5: An Office Experience

**Time:** 12.5 hours

### Unit Description

Students are required to demonstrate overall mastery of the course content and expectations. Students demonstrate and apply their knowledge of creating an ergonomic workstation. They demonstrate the ability to operate in an electronic communication/multi-tasking environment. Students create and maintain an appropriate file management system. Students also evaluate and select appropriate software with which to create business reports. They complete research on-line (including finding, selecting and verifying electronic information), compile their findings and e-mail them to the teacher. Students are given an ethical quandary and asked to react and respond appropriately to it. Students, given hypothetical work experience information, update the cover letter and resume created for their career portfolio begun in Unit 4. Using a merged word-processing document, they create a cover letter to be sent to several different companies applying for a position specified by the teacher (i.e., systems analyst or executive assistant). Assessment information is compiled using rubrics that are provided to students for each activity (see categories listed below under Summative Evaluation.).

### Unit Overview Chart

Act.	Time	Expectations	Assessment	Focus
1	75 min	II1.01, II1.02, II2.02, II3.05 CGE2b, 2c, 3c, 4b, 4f	Knowledge/Understanding Application	Creating an Ergonomic Workstation
2	150 min	ER3.05, ERV.03, II1.02, EB2.01, II3.01, ER3.03, ER3.05, II3.02, EB2.03 CGE2b, 2c, 3b, 3c, 4b, 4f	Thinking/Inquiry Knowledge/Understanding Communication	Working In an Electronic Communication/ Multi-tasking Environment
3	150 min	SIV.01, SI1.01, SI1.03, SI2.01 CGE2b, 2c, 3b, 3c, 4b, 4f	Knowledge/Understanding Communication Application	Selection and Use of Appropriate Software for Presentations and Reports
4	150 min	II3.02, EB2.03, ER2.03, ER3.02, ER2.01, ERV.02, II3.03 CGE3c, 3d, 4f, 5g	Knowledge/Understanding Thinking/Inquiry Application	Finding, Selecting, and Verifying Electronic Information
5	75 min	EBV.02, EB2.02, EB2.03, ER3.02, ER2.02 CGE1d, 3b, 3c, 3d, 3f, 4a, 4f, 5e, 7a, 7b, 7e	Thinking/Inquiry Communication Application	The Ethical Quandary
6	150 min	PEV.03, PE3.03, PE3.02, PE2.04, PE2.03, SIV.02, PE2.02, PE2.01, SI2.03, SIV.03 CGE4b, 4e, 4g	Knowledge/Understanding Application Communication	Updating a Personal Career Portfolio

### Teaching/Learning Strategies

Teaching/Learning Strategies for the BTA30 Course Profile include the following.

- *Guest Speakers:* Guest speakers from a community business who use the latest computer technology could be invited to share examples of how they use software to achieve their business objectives. Examples would include the use of a spreadsheet to project future earnings or the use of an electronic presentation to market a product or idea.
- *Conferencing:* Discussions are held with each student on a one-to-one basis concerning the progress of independent work.
- *Independent Study:* Students research a topic of interest from either a list submitted to the students by the teacher or a topic that a student conceived and approved by the teacher.
- *Brainstorming:* Students are encouraged to generate many ideas in the belief that his/her ideas will not be analysed or criticized.
- *Cooperative Learning:* Small-group participation occurs where teamwork is stressed in order to prepare students for their future work environments.
- *Presentation:* Students create electronic presentations of researched subjects to the entire class.
- *Whole Group Instruction:* The teacher instructs the class as a unit.

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## **Assessment & Evaluation of Student Achievement**

Seventy percent of the grade is based on assessments (formative) and evaluations (summative) conducted throughout the course.

Course assessment and evaluation includes the following four categories.

### **Knowledge/Understanding**

- Written tests at the end of each unit;
- Written quizzes throughout the course;
- Question and answer sessions for review of previous material.

### **Thinking/Inquiry**

- In-class assignments;
- Independent research;
- Performance tasks.

### **Communication**

- Written assignments;
- Presentations.

### **Application**

- Presentations;
- Newsletter;
- Computer programs.

### **Assessment tools include:**

- Checklists;
- Rubrics with the use of exemplars to outline clear criteria;
- Anecdotal comments on student output to encourage improvement.

## **Final Evaluation**

### **Thirty Percent Summative Evaluation**

Final Activities include the updating of the student's Personal Career Portfolio. These activities could be done over the last two weeks of the course. All the activities are assessed based on software application and research skills, office procedures, the application of the knowledge of work environments, and the application of the knowledge of Catholic teachings.

## **Accommodations**

An exceptional student's Individual Educational Plan (IEP) should be consulted before attempting to provide learning experiences for him/her. Appropriate Special Education support staff should also be consulted to ensure that the physical environment is suitable to the needs of the student. The following are suggested strategies used in this course:

- inclusion of recommendations from the student's OSR or IPRC; provision of adaptive hardware devices (e.g., large screen monitors, larger fonts, specially designed keyboards, voice-activated equipment, reading machines);
- provision of word lists, glossaries, definition of terms, and visuals where available;
- use of cooperative learning (stronger students to assist weaker students);
- provision of alternative assignment topics to accommodate student's interests (for motivational purposes) and choice of assignment formats where possible;
- provision of immediate feedback, use of praise and positive feedback, and one-to-one conferencing;
- flexibility with timelines;
- provision of more detailed notes or instructions;

- reinforcement of written instructions with verbal instructions;
- repetition of demonstrations and the use of visual aids to assist students where possible;
- adjustment of expectations for written work and the number of assignments required;
- provision of alternative assessment methods such as oral testing, taped answers, and scribing for students with writing difficulties;
- use of peer tutors if available;
- provision of clarification of assessment/evaluation tools (e.g., rubrics, checklists);
- provision of opportunities for enrichment purposes (e.g., enrichment students could become mentors to peers or staff requiring extra assistance).

## Resources

### Human Resources

Computer Site Administrator from the board office or the school  
 Computer technicians (from the board office and/or community)  
 School teacher-librarian and Special Education teacher  
 School Chaplain  
 Parents employed in the Information Technology industry

### Software

Ministry issued application software (OESS)  
 Application Software not purchased by the Ministry that provides the teacher with the ability to meet the Ministry course expectations and also operates on the school hardware. The application software used should be consistent with that used in local industry whenever possible.  
 A planned path for language skill development in Grades 10, 11, and 12 that takes into account the most likely postsecondary destinations and required preparation within the school community.  
 District standards/conventions/policy and available supporting resources

### Books

Adeney, Douglas and John Weckert. *Computer & Information Ethics*. Westport, Connecticut: Greenwood Publishing Group, 1997. ISBN 0313293627

Ayres, Robert. *The Essence of Professional Issues in Computing*. New Jersey: Prentice Hall, 1999. ISBN 0-13-908740-0

Baase, Sara. *The Gift of Fire: Social, Legal and Ethical Issues in Computing*. New Jersey: Prentice Hall, 1997. ISBN 0-13-458779-0

Baird, Robert M., Reagan Mays Ramsower, and Stuart E. Rosenbaum, eds. *Cyberethics: Social & Moral Issues in the Computer Age*. New York: Prometheus Books, 2000. ISBN 1573927902

Blanc, Iris and Cathy Vento. *Learning Corel WordPerfect Suite 8*. Downsview, ON: Monarch Books of Canada Ltd., 2000. ISBN 1-56243-590-6 (www.ddcpub.com)

Bucki, Lisa and Judy Fischer. *Learning Computer Applications: Projects & Exercises*. Downsview, ON: Monarch Books of Canada Ltd., 2000. ISBN 1-56243-750-X (www.ddcpub.com)

Bucki, Lisa. *Business Simulations with Learning Microsoft Office 2000*. Downsview, ON: Monarch Books of Canada Ltd., 2000. ISBN 1-56243-861-1 (www.ddcpub.com)

*Curriculum Matters: A Resource for Catholic Educators*. Institute for Catholic Education, 1996.

Davis, Peter T. *Complete LAN Security Control*. DIANE Publishing Company, 1999. ISBN 078816547X

Edgar, Stacey L. *Morality & Machines: Computer Ethics*. Sudbury, Massachusetts: Jones & Bartlett Publishers, 1996. ISBN 076370184X

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- Ermann, M. David, ed. and Mary B. Williams. *Computers, Ethics, and Society*. New York: Oxford University Press, 1997. ISBN 019510756X
- Fites, Philip E., Peter Johnston, and Martin Kratz. *The Computer Virus Crisis*. DIANE Publishing Company, 1999. ISBN 0788165283
- Gelman, Bob and Stanton McCandlish. *Protecting Yourself Online: The Definitive Resource on Safety, Freedom, and Privacy in Cyberspace*. Harper Collins Publishers, Inc., 1998. ISBN 0062515128
- Learning the Internet for Business*, 2nd ed. Downsview, ON: Monarch Books of Canada Ltd., 2000. ISBN 1-58577-088-4 (www.ddcpub.com)
- Forester, Tom and Perry Morrison. *Computer Ethics: Cautionary Tales and Ethical Dilemmas in Computing*. Cambridge, Massachusetts: MIT Press, 1993. ISBN 0262560739
- Gould, Carol C. *The Information Web: Ethical & Social Implications of Computer Networking*. Boulder, Colorado: Westview Press, 1989. ISBN 081330699X
- Johnson, Deborah G. *Computer Ethics*, 2nd ed. New Jersey: Prentice Hall, 1994. ISBN 0-13-290339-3
- Johnson, Deborah G. and Helen Nissenbaum, eds. *Computers, Ethics and Social Values*. New Jersey: Prentice Hall, 1995. ISBN 0131031104
- Kizza, Joseph M. and Patrick F. Sullivan. *The Social & Ethical Effects of the Computer Revolution*. McFarland & Company, Incorporated Publishers, 1996. ISBN 0786402059
- Neumann, Peter G. *Computer Related Risks*. Addison-Wesley, 1995. ISBN 0-201-55805-X
- Mendina, G.T. and Lester J. Pourciau ed. *Ethics and Electronic Information in the Twenty-First Century*. Purdue University Press, 1998. ISBN 1557531382
- Schaub, James L. and Ken D. Biery. *The Ultimate Computer Security Survey*. DIANE Publishing Company, 1999. ISBN 0788165143
- Schneier, Bruce. *Secrets and Lies: Digital Security in a Networked World*. N.Y.: John Wiley & Sons, 2000. ISBN 0471253111
- Severson, Richard James. *The Principles of Information Ethics*. N.Y.: M.E. Sharpe, 1997. ISBN 1563249588
- Sexton, Conor. *E Commerce and Security*. Butterworth – Heinemann, 2000. ISBN 0750639423
- Sobel, David. *Filters and Freedom: Free Speech Perspectives on Internet Content Controls*. Washington, DC: Electronic Privacy Information Centre, 1999. ISBN 1893044068
- Spinello, Richard A. *Case Studies in Information and Computer Ethics*. New Jersey: Prentice Hall, 1996. ISBN 013533845
- Spinello, Richard A. *CyberEthics: Morality and Law in Cyberspace*. Sudbury, Massachusetts: Jones & Bartlett Publishing, 2000. ISBN 0763712698
- SRI International Staff. *Ethical Conflicts in Information & Computer Science, Technology, & Business*. New York: John Wiley & Sons, Incorporated, 1993. ISBN 0894353136
- Weixel, Suzanne, Nancy Kaczmarczyk, Sue Plumley, Jennifer Fulton, and Rick Winter. *Learning Microsoft Office 2000*. Downsview, ON: Monarch Books of Canada Ltd., 2000. ISBN 1-56243-638-4 (www.ddcpub.com)
- White, Gregory B., Udo W. Pooch, and Eric A. Fisch. *Computer System and Network Security*. DIANE Publishing Company, 1999. ISBN 0788165542

### **Training Kit**

*The Journey Inside The Computer*. Computer training kit, available from Intel Corporation <http://secure.wesweb.com/intel/form.htm> (two videos, an instructional binder, and electronic components)

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## Websites

**Note:** The URLs for the websites have been verified by the writers prior to publication. Given the frequency with which these designations change, teachers should always verify the websites prior to assigning them for student use.

Tapscott, Don. Growing Up Digital – <http://www.growingupdigital.com>

A website dedicated to the Net Generation. Discussion groups, activities, and information.

Infoworld Magazine – <http://www.inforworld.com>

Interviews, subject Index, Careers, Search Engine

PC World Magazine – <http://www.pcworld.com>

News, Reviews, How-To, Fileworld, Search Engine

Harris, Robert. “Problem Solving Techniques.” 2 July 1998. On-line. Internet. [October 10, 1999] –

[http://www.sccu.edu/faculty/R\\_Harris/crebook4.htm](http://www.sccu.edu/faculty/R_Harris/crebook4.htm)

<http://www.job-search-engine.com>

This site is not just a Job Board, but rather an informative website dedicated to employment. It searches the top USA and Canadian job boards in parallel and in real time and brings back a composite result of how many employment openings match your query.

These sites relate to the use of technology to Catholic teachings –

<http://www.fcsn.k12.nd.us/Shanley/broanth/media.htm>

<http://listserv.american.edu/catholic/church/papal/jp.ii/computer-culture.html>

<http://www.diopitt.org/education/tcerF975.htm>

## Computer Hardware

<http://www.computer.org/> (IEEE Computer Society)

<http://www.hardwarecentral.com/hardwarecentral>

[www.looksmart.com](http://www.looksmart.com)

## Ergonomics

<http://www.ergoweb.com/>

[http://www.safetyoffice.uwaterloo.ca/hspm/documents/office\\_ergo/ergo/vdt.html](http://www.safetyoffice.uwaterloo.ca/hspm/documents/office_ergo/ergo/vdt.html)

<http://ergo.human.cornell.edu/>

[http://ergonomics.ucla.edu/Ergowebv2.0/office\\_ergonomics.htm](http://ergonomics.ucla.edu/Ergowebv2.0/office_ergonomics.htm)

<http://www.uhs.berkeley.edu/FacStaff/Ergonomics/>

## E-Business

<http://www.businessweek.com/> (Business Week on-line)

<http://www.gbd.org> (global business dialogue)

## Netiquette

<http://www.learnthenet.com/english/glossary/netquet.htm>

<http://www.webopedia.com/>

<http://dtcc.edu/cs/rfc1855.html>

<http://www.fau.edu/netiquette/net/ten.html> (The Net: User Guidelines and Netiquette)

<http://www.albion.com/netiquette.introduction.html> (An Introduction of Netiquette)

<http://www.cochran.com/start/guide/Netiquette.html> (Life on the Internet: Netiquette)

<http://www.albion.com/netiquette/corerules.html> (The Core Rules of Netiquette)

<http://www.primenet.com/~vez/neti.html>

<http://www.arcetri.astro.it/CC/Eng-BonTon.html> (The Computer Etiquette)

<http://cythera.unb.ca/capmb/youth/admin/computeretiquette.html> (Computer Etiquette)

<http://www.rpi.edu/Computing/Ethics/etiquette.html>

<http://www.instantweb.com/~foldoc/foldoc.cgi?query=netiquette> (netiquette from FOLDOC)

<http://webreference.com/roadmap/map07.html>

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<http://www.learnthenet.com/english/html/09netiq.t.hrm> (LEARN THE NET: Netiquette)  
<http://dove.net.au/~omalley/netiquette/homenetiquette.html> (Netiquette - the cartoon series!)  
<http://www.darkmountain.com/netiquette/index.shtml> (Dark Mountain's Netiquette Guide)  
<http://www.darkmountain.com/netiquette/general.html> (Netiquette Basics)  
<http://www.moneyminded.com/worklife/ahead/57post31.htm>  
<http://www.moneyminded.com/worklife/ahead/57postc1.htm>  
<http://www.bspage.com/1netiq/Netiq.html> (Business Netiquette International)  
<http://www.josephsoninstitute.org/>

### **Ethics**

<http://www.turnitin.com>  
<http://plagiarism.com>  
<http://depaul.edu/ethics/resource.html>  
<http://www.ethics.ubc.ca/resources/computer>  
<http://www.ethicscompliance.com>  
<http://web.mit.edu/network/pgp.html>  
<http://caast.org> (Canadian Alliance Against Software Piracy)  
<http://www.Microsoft.com/piracy>  
<http://www.siiia.net/piracy> (Software and Information Industry Association)  
<http://www.nopiracy.com>

### **Careers**

<http://careerbookmarks.tpl.toronto.on.ca/>  
<http://computercareers.net>  
<http://computerjobs.com>  
<http://on.cx.bridges.com>  
<http://techweb.com/careers>  
<http://www.adm.uwaterloo.ca/infocecs/CRC/manual-home.html/>  
<http://www.careercruising.com/home/index.html>  
<http://www.careersonline.com.au/>  
<http://www.computer.work.com>  
<http://www.computercareerhelp.com>  
<http://www.jobs-careers.com>

### **Course Evaluation**

After the initial offering of the course, evaluation may be carried out through interviews with a sampling of students who have completed the course. Sample questions include:

- Did this course meet your expectations?
- Do you have better ideas of possible careers in this area?
- Would you take another course in this area?
- Would you want a younger brother, sister, or friend to take this course?

### **OSS Policy Considerations**

Resources to support anti-discriminatory education, equity/social justice issues, career goals/cooperative education, and community partnerships support many of the Ontario Secondary School Policies.

In this course, there are activities linked to the Computer Across the Curriculum (culminating activity in Unit 3), and violence prevention (Activity 1, Unit 5).

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# Coded Expectations, Information Technology Applications in Business, Grade 11, Open, BTA30

## The Impact of Information Technology on Business

### Overall Expectations

- IIV.01** · identify and describe a variety of information technology infrastructures in business;
- IIV.02** · describe an information technology work environment;
- IIV.03** · summarize the legal, ethical, social, environmental, and health and safety issues related to the use of information technology.

### Specific Expectations

#### Information Technology Infrastructures

- III.01** – explain the functions of the hardware components, including peripheral devices, of a computer workstation (e.g., mouse, screen, scanner, printer, keyboard, speakers, compact disk drive, floppy disk drive, hard disk drive);
- III.02** – describe appropriate workplace settings (e.g., home office, school, small enterprise, multinational company) for the use of stand-alone, LAN, and WAN environments;
- III.03** – assess the impact of the legacy of outdated equipment on business planning and operations;
- III.04** – summarize the features (e.g., desktop interface, shut-down, start-up) and uses of a variety of operating systems (e.g., Windows 2000, UNIX, Linux, Mac OS);
- III.05** – describe the functions of the desktop elements (e.g., icons, menus, toolbars) of a computer system.

#### The Information Technology Work Environment

- II2.01** – explain the function of the components of a computerized work environment in business;
- II2.02** – describe the characteristics of an ergonomically correct workstation;
- II2.03** – explain the importance of security of information and computer systems (e.g., passwords, encryption, login) in stand-alone, LAN, and WAN environments;
- II2.04** – demonstrate appropriate interpersonal skills and knowledge (e.g., “netiquette” awareness, respect for confidentiality and privacy of information) when interacting with colleagues and peers in the work environment.

#### Information Technology Issues

- III.01** – describe ethical business practices related to the use of information technology (e.g., “netiquette”, syntax, privacy, security, protocol);
- III.02** – demonstrate an understanding of issues related to the use and misuse of electronic data by business;
- III.03** – analyse the social, political, cultural, environmental, and legal implications of the use of information technology for individuals and business;
- III.04** – explain the purpose and content of a global network usage agreement (e.g., the Internet);
- III.05** – summarize health and safety issues (e.g., eye strain, musculo-skeletal injuries, radiation) related to the use of information technology.

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## Software Applications and Information Management

### Overall Expectations

- SIV.01 · demonstrate an understanding of the advanced functions and features of common business software;
- SIV.02 · produce complex documents that meet business standards using accepted business formats;
- SIV.03 · organize data and computer files.

### Specific Expectations

#### Software Applications

- SI1.01 – demonstrate the use of common business software (e.g., word processing, spreadsheet, database, graphic, website production, presentation, publication, and flowchart software);
- SI1.02 – assess emerging hardware, software, and ergonomic practices in business;
- SI1.03 – demonstrate the correct use of the advanced functions (e.g., merge, macros, images) and features (e.g., help wizards, customizing, toolbars, multitasking) of a variety of software;
- SI1.04 – demonstrate the use of software features (e.g., document review, highlighting, markings) that facilitate the joint production of business documents;
- SI1.05 – describe the skills and abilities they will need to use common business software applications.

#### Creation and Use of Business Documents

- SI2.01 – determine the most appropriate software applications required to create particular business documents (e.g., a report requiring a word processor, a spreadsheet, and a graphics tool);
- SI2.02 – produce correctly formatted business documents from printed, handwritten, and revised copies (e.g., business correspondence, reports, graphs, flowcharts, webpages with animation) using appropriate software;
- SI2.03 – organize their work, taking into consideration priorities, the quality of the documents, and time management.

#### Electronic File Management

- SI3.01 – demonstrate an understanding of how electronic files are managed for personal use;
- SI3.02 – explain the different processes for managing electronic data in business and their uses (e.g., folders, bookmarks);
- SI3.03 – arrange, electronically, their personal files into appropriately named folders.

## Electronic Research and Communication

### Overall Expectations

- ERV.01 · demonstrate the use of electronic media to find relevant information;
- ERV.02 · determine the validity of electronic information;
- ERV.03 · demonstrate the use of electronic communication tools.

### Specific Expectations

#### Electronic Research

- ER1.01 – describe forms of electronic media that can be used to gather information for a specific business task (e.g., websites, newsgroups, CD-ROMs);
- ER1.02 – identify electronic sources available to research and monitor investment options;
- ER1.03 – differentiate between primary and secondary data;
- ER1.04 – explain why businesses collect primary data;
- ER1.05 – demonstrate the appropriate use of electronic communication tools to collect primary data.

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## **Information Validation**

- ER2.01** – assess information collected from electronic media for validity, bias, appropriateness, accuracy, and confidentiality;
- ER2.02** – follow copyright and licensing rules and regulations when accessing information electronically;
- ER2.03** – demonstrate an understanding of the issues related to the use and misuse of electronic research data.

## **Electronic Communication**

- ER3.01** – demonstrate an understanding of the uses and benefits to business of a variety of electronic communication tools (e.g., fax, e-mail, voice mail, bulletin boards, intranets, the Internet, extranets);
- ER3.02** – describe potential negative consequences (e.g., fraud, loss of privacy, misunderstanding) of using various electronic communication tools;
- ER3.03** – explain how communication customs, cultures, and environments (e.g., language protocol, type of equipment) may change the way business is conducted;
- ER3.04** – describe the services provided by a variety of Internet Service Providers (ISPs);
- ER3.05** – communicate with others by using electronic tools.

## **Electronic Business**

### **Overall Expectations**

- EBV.01** · describe the concept and operations of electronic business;
- EBV.02** · analyse security, legal, and ethical issues related to conducting business electronically;
- EBV.03** · evaluate the impact of electronic business on business in general.

### **Specific Expectations**

#### **The Concept and Operations of Electronic Business**

- EB1.01** – define the concept of electronic business;
- EB1.02** – explain how electronic business works;
- EB1.03** – describe the equipment and human resources required to conduct business electronically;
- EB1.04** – evaluate the site of an electronic business in various contexts (e.g., content, format, usefulness, validity, security).

#### **Electronic Business Security Issues**

- EB2.01** – explain the security measures that electronic businesses provide for consumers (e.g., encryption, passwords, user identification);
- EB2.02** – describe the laws that protect consumers and businesses who do business electronically (e.g., customs regulations, international trade agreements, fraud laws, copyright laws);
- EB2.03** – evaluate the ethical issues involved in doing business electronically (e.g., confidentiality, validity, credibility, integrity).

#### **The Impact of Electronic Business**

- EB3.01** – explain the impact of electronic business on competition;
- EB3.02** – describe how electronic business has affected aspects of the organizational structure of businesses (e.g., the sales department, customer service, inventory handling, and marketing departments);
- EB3.03** – identify and describe ways in which electronic business has changed conditions of employment (e.g., hours of work, interpersonal relationships, equipment);

- 
- EB3.04** – evaluate the financial implications of doing business electronically (e.g., effect on exchange rates, taxes and duties, shipping costs);
- EB3.05** – summarize financial planning tools (e.g., exchange rates, mutual funds, income statements) available on the World Wide Web.

## **Preparation for Employment**

### **Overall Expectations**

- PEV.01** · summarize business opportunities and postsecondary programs related to information technology;
- PEV.02** · assess their information technology skills and competencies;
- PEV.03** · create, electronically, a personal growth plan for their information technology skills.

### **Specific Expectations**

#### **Postsecondary Opportunities**

- PE1.01** – summarize, electronically, current job advertisements that require information technology skills and education;
- PE1.02** – identify postsecondary programs that require knowledge about and skills in the use of information technology;
- PE1.03** – describe the educational qualifications needed to gain entry into technology-related occupations or postsecondary programs;
- PE1.04** – identify career-related resources (e.g., résumé preparation, interview preparation, online job postings, interest inventory) through a search on a global network (e.g., the Internet).

#### **Assessment of Skills and Competencies**

- PE2.01** – demonstrate their information technology competencies by creating a skills inventory (e.g., skills in text formatting, presentation animation, electronic communication);
- PE2.02** – summarize, electronically, their information technology skills (e.g., skills in electronic presentation, electronic job search, file management);
- PE2.03** – demonstrate information technology skills in preparing samples of their work;
- PE2.04** – demonstrate an understanding of the importance of keeping records and samples of exemplary work (e.g., skills development checklist, portfolio, résumé) in preparation for future employment.

#### **The Information Technology Growth Plan**

- PE3.01** – describe the components of a growth plan;
- PE3.02** – create, electronically, a personal growth plan for developing their information technology skills and competencies;
- PE3.03** – explain the importance of regularly reviewing, revising, and updating their growth plan.

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## Ontario Catholic School Graduate Expectations

The graduate is expected to be:

**A Discerning Believer Formed in the Catholic Faith Community** who

- CGE1a** -illustrates a basic understanding of the **saving story** of our Christian faith;
- CGE1b** -participates in the **sacramental life** of the church and demonstrates an understanding of the centrality of the Eucharist to our Catholic story;
- CGE1c** -actively reflects on **God’s Word** as communicated through the Hebrew and Christian scriptures;
- CGE1d** -develops attitudes and values founded on Catholic **social teaching** and acts to promote social responsibility, human solidarity and the common good;
- CGE1e** -speaks the **language of life**... “recognizing that life is an unearned gift and that a person entrusted with life does not own it but that one is called to protect and cherish it.” (Witnesses to Faith)
- CGE1f** -seeks intimacy with God and celebrates **communion** with God, others and creation through prayer and worship;
- CGE1g** -understands that one’s purpose or **call in life** comes from God and strives to discern and live out this call throughout life’s journey;
- CGE1h** -respects the **faith traditions**, world religions and the life-journeys of **all people of good will**;
- CGE1i** -integrates faith with life;
- CGE1j** -recognizes that “sin, human weakness, conflict and forgiveness are part of the human journey” and that the cross, the ultimate sign of forgiveness is at the heart of **redemption**. (Witnesses to Faith)

**An Effective Communicator** who

- CGE2a** -listens actively and critically to understand and learn in light of gospel values;
- CGE2b** -reads, understands and uses written materials effectively;
- CGE2c** -presents information and ideas clearly and honestly and with sensitivity to others;
- CGE2d** -writes and speaks fluently one or both of Canada’s official languages;
- CGE2e** -uses and integrates the Catholic faith tradition, in the critical analysis of the arts, media, technology and information systems to enhance the quality of life.

**A Reflective and Creative Thinker** who

- CGE3a** -recognizes there is more grace in our world than sin and that hope is essential in facing all challenges;
- CGE3b** -creates, adapts, evaluates new ideas in light of the common good;
- CGE3c** -thinks reflectively and creatively to evaluate situations and solve problems;
- CGE3d** -makes decisions in light of gospel values with an informed moral conscience;
- CGE3e** -adopts a holistic approach to life by integrating learning from various subject areas and experience;
- CGE3f** -examines, evaluates and applies knowledge of interdependent systems (physical, political, ethical, socio-economic and ecological) for the development of a just and compassionate society.

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**A Self-Directed, Responsible, Life Long Learner** who

- CGE4a** -demonstrates a confident and positive sense of self and respect for the dignity and welfare of others;
- CGE4b** -demonstrates flexibility and adaptability;
- CGE4c** -takes initiative and demonstrates Christian leadership;
- CGE4d** -responds to, manages and constructively influences change in a discerning manner;
- CGE4e** -sets appropriate goals and priorities in school, work and personal life;
- CGE4f** -applies effective communication, decision-making, problem-solving, time and resource management skills;
- CGE4g** -examines and reflects on one's personal values, abilities and aspirations influencing life's choices and opportunities;
- CGE4h** -participates in leisure and fitness activities for a balanced and healthy lifestyle.

**A Collaborative Contributor** who

- CGE5a** -works effectively as an interdependent team member;
- CGE5b** -thinks critically about the meaning and purpose of work;
- CGE5c** -develops one's God-given potential and makes a meaningful contribution to society;
- CGE5d** -finds meaning, dignity, fulfillment and vocation in work which contributes to the common good;
- CGE5e** -respects the rights, responsibilities and contributions of self and others;
- CGE5f** -exercises Christian leadership in the achievement of individual and group goals;
- CGE5g** -achieves excellence, originality, and integrity in one's own work and supports these qualities in the work of others;
- CGE5h** -applies skills for employability, self-employment and entrepreneurship relative to Christian vocation.

**A Caring Family Member** who

- CGE6a** -relates to family members in a loving, compassionate and respectful manner;
- CGE6b** -recognizes human intimacy and sexuality as God given gifts, to be used as the creator intended;
- CGE6c** -values and honours the important role of the family in society;
- CGE6d** -values and nurtures opportunities for family prayer;
- CGE6e** -ministers to the family, school, parish, and wider community through service.

**A Responsible Citizen** who

- CGE7a** -acts morally and legally as a person formed in Catholic traditions;
- CGE7b** -accepts accountability for one's own actions;
- CGE7c** -seeks and grants forgiveness;
- CGE7d** -promotes the sacredness of life;
- CGE7e** -witnesses Catholic social teaching by promoting equality, democracy, and solidarity for a just, peaceful and compassionate society;
- CGE7f** -respects and affirms the diversity and interdependence of the world's peoples and cultures;
- CGE7g** -respects and understands the history, cultural heritage and pluralism of today's contemporary society;
- CGE7h** -exercises the rights and responsibilities of Canadian citizenship;
- CGE7i** -respects the environment and uses resources wisely;
- CGE7j** -contributes to the common good.

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## Unit 2: Security/Ethics

**Time:** 26.25 hours

### Unit Description

Technology offers people quick and easy access to a wealth of information. When this information is accessed, more information, in the form of logs and records, is created. It is important for students to know how to protect their personal files and information from those who wish to use them in inappropriate or unethical ways. Students must learn how to live as part of a world community and must learn to use electronic information and communication tools in an ethical and meaningful way. This unit, while emphasizing the teachings of the Catholic Church in the areas of ethics, bias and inclusion, focuses on a discussion of the ethical use of resources in a business environment and on the issues of netiquette, security, copyright and plagiarism. Examples of how Catholic expectations can be implemented into the curriculum for this business course are included.

### Activity 1: Security Policies and Procedures

**Time:** 150 minutes

#### Description

Students learn or review computer policies at their school. They gain understanding of how to login to the computer, change their password, and protect their password so that other students will not gain access to their files. Students are also introduced to an example case study: assume that a student forgot to log off thereby leaving his/her user ID on. The teacher takes students through the Rule that applies to this situation, the infraction that applies to this situation, and the rationale for the remedy.

#### Strand(s) & Learning Expectations

**Ontario Catholic School Graduate Expectations:** CGE 2b; CGE 3c; CGE 5e; CGE 7a; CGE 7b.

#### Overall Expectations

IIV.03 - summarize the legal, ethical, social, environmental, and health and safety issues related to the use of information technology;

EBV.02 - analyse security, legal, and ethical issues related to conducting business electronically;

SIV.03 - organize data and computer files.

#### Specific Expectations

II2.03 - explain the importance of security of information and computer systems (e.g., password, encryption, login) in stand-alone, LAN, and WAN environments;

II3.04 - explain the purpose and content of a global network usage agreement (e.g., the Internet);

EB2.01 - explain the security measures that electronic businesses provide for consumers (e.g., encryption, passwords, user identification).

#### Planning Notes

Have students bring student planners (which include school policy) with network login procedures and create an overhead of the same page.

#### Prior Knowledge & Skills

- keyboarding skills, experience with the use of a mouse, changing passwords using 5 to 10 characters, double clicking, selecting program icons, and scrolling in the windows screen
- prior knowledge of margins, fonts, style, and justification in word processing

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## Teaching/Learning Strategies

The teacher:

- reviews the school network procedures and policies and directs students to login to their computers;
- uses the overhead to outline a fictitious teacher whose passion is soccer and has coached a number of provincially ranked school teams and watches Manchester United football games on television;
- asks the students to generate five words that should NOT be used as passwords;
- shows the students how to choose and change their password (reminding the students that they may use numbers and symbols) so that no one would be able to access their login IDs;
- distributes case study to students that outlines the following situation. A student tells his/her friend his/her password. The latter logs into the former's user ID and sends a copy of a file containing inappropriate text to a teacher's directory and then deletes the original file. The teacher discovers the file and is able to trace the file to the student who had shared his/her password. Students are to identify which school policies and/or rules have been violated, what consequences should occur and to whom should these consequences apply;
- discusses the school policy that applies to the described offence;
- divides students into groups of two to three students and distribute copies of Appendix Unit 2.1.1 to each student that includes a table and checklist outlining the creation of the table;
- teaches students how to create a table.

Student groups:

- create a table using checklist guidelines and identify within each table: the school policy that was infringed, the guilty parties, and the appropriate punishment for this offence;
- submit one copy of the table to the teacher's directory at the end of the class.

## Assessment & Evaluation of Student Achievement

The teacher and students gather assessment information based on the activities described:

- A formative assessment which involves conferencing with each student to ensure that all students have chosen a unique password; checklist for self-assessment of table
- A summative evaluation which includes a checklist for the table (Appendix 2.1.1)

## Activity 2: Ethical/Legal Use of Resources

**Time:** 300 minutes

### Description

Through class discussion, students develop their own definition of ethics. Students are introduced to a formal definition of ethics. Core ethical values for making ethical decisions are discussed. Awareness is developed concerning the pitfalls of common rationalizations used when making decisions and of the consequences of ethical and unethical decision-making on society. The impact of Christian and Catholic values on the making of decisions is addressed. Students learn about global computer user agreements or policies and examine and justify components of their own school's computer user policy. Acceptable use policies for computer users of various organizations are examined and reported on. Students examine the LISTEN method of decision-making. Case studies involving ethical/legal use of resources are assigned to students in small groups for discussion. Groups summarize their case study using an electronic slide presentation and present their findings to the class.

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## Strand(s) & Learning Expectations

**Ontario Catholic School Graduate Expectations:** CGE1d, CGE2a, CGE3c, CGE3d, CGE3f, CGE4f, CGE5e, CGE7a, CGE7b, CGE7i.

**Strand(s):** The Impact of Information Technology on Business, Electronic Business, Software Applications and Information Management, Electronic Research and Communication

### Overall Expectations

IIV.03 - summarize legal, ethical, social, environmental, and health and safety issues related to the use of information technology;

EBV.02 - analyse security, legal, and ethical issues related to conducting business electronically;

SIV.01 - demonstrate an understanding of the advanced functions and features of common business software;

ERV.01 - demonstrate the use of electronic communication tools.

### Specific Expectations

I3.03 - analyse the social, political, cultural, environmental, and legal implications of the use of information technology for individuals and business;

SII.01 - demonstrate the use of common business software (e.g., word processing, spreadsheet, database, graphic, website production, presentation, publication, and flowchart software);

SII.03 - demonstrate the correct use of the advanced functions (e.g., merge, macros, images) and features (e.g., help wizards, customizing, toolbars, multitasking) of a variety of software.

### Planning Notes

The teacher may wish to review the concept of ethics and ethical decision making. The teacher should review the Ten Commandments and the Seven Principles of Catholic Social Teaching and Catholic Education found on pp. 28-30 of Philip G. Hill's *Ontario Catholic Education and the Corporate Sector: A Report Submitted to the Institute for Catholic Education*, Institute for Catholic Education, 1997, ISBN 0-96991-78-4-8. A summary of the six major themes of Catholic social teaching documents of the last century is available at <http://www.osjspm.org/cst6prin.htm>. The teacher may create a handout of the policy rationale chart. This could also be photocopied and distributed to students.

### Prior Knowledge & Skills

- basic word-processing skills
- basic Internet search skills
- basic slide presentation capabilities

### Teaching/Learning Strategies

#### Activity 2.1 – Ethics and Ethical Decision Making

The teacher:

- elicits from students their definition of “ethics” and gives students a definition for ethics from Merriam-Webster OnLine (<http://www.m-w.com/>), which should be copied into their notebooks;
- asks students to brainstorm the values they believe are important when making ethical decisions;
- leads a discussion to focus on core ethical values (see Appendix 2.2.1) and the rationalizations often given to avoid making ethical decisions (see Appendix 2.2.2);
- asks students what happens when people live/do not live according to these guidelines;
- connects ethical decision-making to the Catholic perspective by discussing the quote from Pope John Paul II's *On The Culture of Life and the Culture of Death* (see Appendix 2.2.3);
- asks students what might result from a lack of ethics in decision-making and why the Pope would be worried about technology in this regard? (e.g., The rise of hate sites and the ease of access to hate materials or hacking and the spread of viruses could be discussed);

- 
- asks how we can bring “Christian” or Catholic values and morality into our ethical decision-making (e.g., the Ten Commandments, Seven Principles of Catholic Social Teaching and Catholic Education);
  - explains the terms Computer User Agreement/Policy or Global Usage Agreement or Internet Acceptable User Agreement. (The teacher explains that these are based on the core ethical values discussed above.)

Students:

- examine their own school’s Computer User Policy;
- consider the rationale for including five of the points under the following headings: Policy item, Reason for Inclusion, Ethical Value(s) Considered;
- in a paragraph under the chart, explain how Computer User Policies would be different for larger organizations and when they think individual rights supersede those of the group and vice versa? Why?;
- submit their charts and paragraphs for assessment using checklist (Appendix 2.2.4).

### Activity 2.2 – Global Usage Agreements

The teacher:

- instructs students to perform Internet searches aimed at finding computer user policies of three different types of organizations: a large company, an educational institution, and a community-based organization such as a library, etc.;
- instructs students regarding the creation/editing of a word-processing document utilizing columns of differing widths including inserting graphics which span more than one column.

Students:

- create a word-processing document with columns of differing widths. Students comment on the three sites visited under the headings: Similarities, Differences, and Consequences for Not Following the Policy. Students clearly identify the three sites visited and add a logo from each organization’s site to the document in differing locations with differing styles of wrapping text around the graphics;
- submit the document for summative evaluation (see Appendix 2.2.5 for rubric).

### Activity 2.3 – Ethical Case Studies

The teacher:

- introduces the LISTEN Method of decision-making to students.  
Look for the facts (figure out what the real situation is – what, who, when, where, why, how)  
Imagine possibilities (consequences, creative options)  
Seek insight beyond your own (family, wise persons, religion, moral principles)  
Turn inward (feelings, insights from experience, motives, values “gut feelings”)  
Expect God’s help (God is present in your life and in your honest attempts to seek the truth)  
Name your decision (perhaps you must put it off for a time, don’t just drift, if you don’t decide, someone else will decide for you);
- divides the class into groups of two or three and assigns a case to each group (see Appendix 2.2.6).

Students:

- prepare an electronic slide presentation of their findings. Students use the following features: transitions, graphics, chart, bulleted text and appropriate choice of fonts;
- present the case (or ethical problem) for study, using the LISTEN Model to complete a chart showing their findings in the case, and give the rationale for their decision explaining what core ethical principles and Christian values weighed in their decision;
- present their findings to the class. A short, timed discussion of each case occurs, if time allows.

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## Assessment & Evaluation of Student Achievement

The teacher and students gather assessment information based on the specific expectations, including:

- formative assessment of student participation in class discussions based on observation;
- formative assessment of the chart and paragraph on school computer and Internet user policy (Appendix 2.2.4);
- summative evaluation of word-processed document with columns and graphics (Appendix 2.2.5);
- summative evaluation of the slide presentation with findings (Appendix 2.2.7);
- summative evaluation of personal and Christian development in slide presentation.

## Accommodations

The following are ways in which the activities can meet student's individual needs:

- provide individual or small group support to students who are lacking the required background skills;
- grouping of strong students with peers who require extra assistance;
- provide computer access outside of class time;
- encourage students who require enrichment to visit more challenging websites;
- provide a glossary of ethics terminology with definitions.

## Resources

### Ethics/Ethical Decision Making

<http://library/thinkquest.org/>

<http://www.goodcharacter.com> (free character education resources for teachers)

<http://josephsoninstitute.org/MED/medtoc.htm> (The Six Pillars of Character)

Ahlers, Julia, Barbara Allaire, and Carl Koch. *Teaching Manual for Growing in Christian Morality*. Winona, Minnesota: Saint Mary's Press, 1996. ISBN 0-88489-388-X (LISTEN Method)

### Catholic Teaching

<http://www.faynet.com/csmfay/princip1.htm> (Major principles of Catholic Social Teaching)

<http://www.osjspm.org/cst6prin.htm> (Principles of Catholic Social Teaching)

<http://www.uscatholic.org/cstline/tline.html> (Busy Christian's Guide to Catholic Social Teaching)

<http://www.csnmail.net/~dsao/cst1.htm> (Overview of Catholic Social Teaching)

<http://www.osjspm.org/cst/csted.htm> (Resources for Catholic Educators)

<http://www.csbsju.edu/library/research/theomor1.html> (Moral Theology Resources)

## Activity 3: Computer Etiquette or "Netiquette"

**Time:** 225 minutes

### Description

Students make use of the following word-processing concepts: margins, cut and paste functions, and bullets and numbering. Students define etiquette and netiquette. Students search Internet netiquette sites to develop a list of rules that fall under the following categories: Violations of Catholic Teachings, Business Netiquette, Social Netiquette, Legal and Philosophical Netiquette Issues, Violations of Netiquette. Some people think that a lower standard of ethics, personal behaviour or quality of communication is acceptable on the Internet. Students are made aware that many of the violations of netiquette can also be considered violations of Catholic Teachings and ethical principles. Students take part in a web pal communication where their netiquette is assessed.

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## Strand(s) & Learning Expectations

**Ontario Catholic School Graduate Expectations:** CGE1d, CGE2a, CGE2b, CGE2c, CGE2d, CGE3b, CGE3c, CGE4a, CGE4f, CGE5e, CGE5g, CGE7a, CGE7b, CGE7e.

**Strand(s):** The Impact of Information Technology on Business, Software Applications and Information Management, Electronic Research and Communication

### Overall Expectations

IIV.03 - summarize the legal, ethical, social, environmental, and health and safety issues related to the use of information technology;

ERV.01 - demonstrate the use of electronic media to find relevant information;

ERV.03 - demonstrate the use of electronic communication tools.

### Specific Expectations

II2.04 - demonstrate appropriate interpersonal skills and knowledge (e.g., “netiquette” awareness, respect for confidentiality and privacy of information) when interacting with colleagues and peers in the work environment;

II3.01 - describe ethical business practices related to the use of information technology (e.g., “netiquette”, syntax, privacy, security, protocol);

SII.01 - demonstrate the use of common business software (e.g., word processing, spreadsheet, database, graphic, website production, presentation, publication, and flowchart software);

ER3.03 - explain how communication customs, cultures, and environments (e.g., language protocol, type of equipment) may change the way business is conducted;

ER3.05 - communicate with others using electronic tools;

ERV.03 - demonstrate the use of electronic communication tools.

### Planning Notes

- The teacher prepares and distributes a file to students containing links for netiquette websites.
- The teacher finds an appropriate classroom connection for web pals activity.

### Prior Knowledge & Skills

- basic e-mail skills

### Teaching/Learning Strategies

#### Activity 3.1 – Etiquette/Netiquette

The teacher:

- leads a class discussion to develop a definition for the word “etiquette”;
- shares an appropriate definition of the term etiquette with students;
- leads a discussion of the definition of the word “netiquette”;
- instructs students on the use of copy and paste functions, multi-tasking using the Internet, and a word processor (concept of bullets and numbering);
- transfers an electronic document to students containing the Netiquette sites listed below:  
<http://www.dtcc.edu/cs/rfc1855.html>  
<http://www.fau.edu/netiquette/net/> (The Net: User Guidelines and Netiquette, by Arlene Rinaldi)  
<http://www.albion.com/netiquette/introduction.html> (Introduction – Excerpted from Netiquette by Virginia Shea -- Albion.com)  
<http://www.cochran.com/start/guide/Netiquette.html> (Life on the Internet: Netiquette)  
<http://www.albion.com/netiquette/corerules.html> (The Core Rules of Netiquette -- Excerpted from Netiquette by Virginia Shea -- Albion.com)  
<http://www.albion.com/netiquette/book/index.html> (Netiquette by Virginia Shea)  
<http://www.primenet.com/~vez/neti.html>

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<http://www.arcetri.astro.it/CC/Eng-BonTon.html> (The Computer Etiquette by R. Baglioni, L. Fini, F. Tribioli)

<http://cythera.unb.ca/capmb/youth/admin/computeretiquette.html> (Computer Etiquette)

<http://www.rpi.edu/Computing/Ethics/etiquette.html> (Guide to Computing Etiquette at Rensselaer)

<http://www.instantweb.com/~foldoc/foldoc.cgi?query=netiquette> (Netiquette from FOLDOC)

<http://webreference.com/roadmap/map07.html>

<http://www.learnthenet.com/english/html/09netiq.htm> (LEARN THE NET: Netiquette)

<http://dove.net.au/~omalley/netiquette/homenetiquette.html> (Netiquette - the cartoon series!)

<http://www.darkmountain.com/netiquette/index.shtml> (Dark Mountain's Netiquette Guide)

<http://www.moneyminded.com/worklife/ahead/57post31.htm> (MoneyMinded: Decorum and Ethics)

<http://www.moneyminded.com/worklife/ahead/57postc1.htm> (Money Minded: Netiquette)

<http://www.bspage.com/1netiq/Netiq.html> (Business Netiquette International)

<http://www.josephsoninstitute.org/>

- reviews the headings under which students summarize their findings on Netiquette rules.

Students:

- access the website at <http://www.learnthenet.com/english/glossary/netquet.htm> to check the Glossary for the definition of “Netiquette”. They use the copy and paste function and multi-tasking to copy this definition from the Internet into a word-processing document. They copy and paste the definition for “Netiquette” found at <http://www.webopedia.com/> into the same document. Students use bullets for these definitions. Students rephrase the definition of netiquette in their own words under a third bullet.
- access the Netiquette sites sent to them by the teacher and, considering the definitions created above, give examples of netiquette rules that fit under the following headings: Violations of Catholic Teachings, Business Netiquette, Social Netiquette, Legal and Philosophical Netiquette Issues.
- Send their completed file to the teacher electronically for evaluation (Appendix 2.3.1).

### Activity 3.2 – Web Pals

The teacher:

- assists students to register at an appropriate site for web pals;
- reviews concepts for using e-mail: sending, reading, replying to, and forwarding message to others (in this case the teacher); printing and deleting messages; attachments; and saving messages;
- teaches students icons and the functions of the lines To:, Cc:, Bcc:, Subject:, and Message;
- cautions students against divulging personal information while using electronic or other forms of communication.

Students:

- register for a web pal;
- send e-mail messages to web pals while employing the rules of netiquette learned in the previous classes. All messages are to be Cc'd to the teacher. The topic of discussion should focus on Netiquette. Students should exchange their own Top Ten List of Netiquette Rules. At least one rule should relate to an issue specific to the student's own culture. This rule should be explained in detail to the web pal to promote greater understanding. Each student in the class shares these cultural considerations with the rest of the class. These messages constitute a significant component of the student's evaluation regarding the application of netiquette principles (Appendix 2.3.2).

### **Assessment & Evaluation of Student Achievement**

The teacher and students gather assessment information based on the specific expectations, including:

- summative evaluation of the Netiquette website Activity (use rubric in Appendix 2.3.1);
- summative evaluation of Web Pals Activity (use rubric in Appendix 2.3.2).

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## Accommodations

The following are ways in which the activities can meet student's individual needs.

- Provide individual or small-group support to students who lack prior software application instruction.
- Provide computer access outside of class time.
- Provide a glossary of netiquette terminology with definitions.
- Provide flexible timelines and allow for support as needed.
- Students requiring enrichment modify and expand ideas and existing guidelines with permission.

## Resources

Web Pals – <http://www.epals.com/>

<http://www.linguistic-funland.com/penpalpostings.html>

## Activity 4: Security of Information (FOI, Privacy)

**Time:** 600 minutes

### Description

This activity is basically a debate between two four-member panels selected by student teams to make students aware of the social issues related to Freedom of Information (FOI) that could be created by advancing technologies. Panel members and team members are expected to research and prepare for the debate. All research and prepared materials are submitted individually to the instructor for individual grades and a compiled package from each team is submitted as part of the group project work.

Organization, preparation, and presentation of all reports are considerations in the grade. The debate is done before a panel of judges who make comments regarding the performance of each team. Students gain a greater appreciation for more than one point of view.

### Strand(s) & Learning Expectations

**Ontario Catholic School Graduate Expectations:** CGE1d, CGE2b, CGE2c, CGE3c, CGE3d, CGE3f, CGE4a, CGE4f, CGE5e, CGE7a.

**Strand(s):** The Impact of Information Technology on Business, Software Applications and Information Management, Electronic Research and Communication

### Overall Expectations

ERV.01 - demonstrate the use of electronic media to find relevant information;

ERV.02 - determine the validity of electronic information;

ERV.03 - demonstrate the use of electronic communication tools;

IIV.03 - summarize the legal, ethical, social, environmental, and health and safety issues related to the use of information technology;

SIV.01 - demonstrate an understanding of the advanced functions and features of common business software;

SIV.02 - produce complex documents that meet business standards using accepted business formats.

### Specific Expectations

I13.02 - demonstrate an understanding of issues related to the use and misuse of electronic data by business;

EB2.03 - evaluate the ethical issues involved in doing business electronically (e.g., confidentiality, validity, credibility, integrity);

ER2.03 - demonstrate an understanding of the issues related to the misuse of electronic research data;

ER3.02 - describe potential negative consequences (e.g., fraud, loss of privacy, misunderstanding) of using various electronic communication tools;

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ER2.01 - access information collected from electronic media for validity, bias, appropriateness, accuracy, and confidentiality;

SII.01 - demonstrate the use of common business software (e.g., word processing, spreadsheet, database, graphic, website production, presentation, publication, and flowchart software);

SII.04 - demonstrate the use of software features (e.g., document review, highlighting, markings) that facilitate the joint production of business documents.

### **Planning Notes**

- The teacher collects Internet news articles regarding rising crime rates, how criminals avoid prosecution based on technicalities, and how prevalent the collecting of electronic data on individuals is (e.g., the Net Detective, Net Detective 2001 allows you to find out everything you wanted to know about your friends, neighbours, or your boss, in secret! A Net Detective 2001 Affiliate.)
- Ensure that student e-mail, file sharing, Internet access, and presentation graphics software are available and in working order.
- Find judges for the debate representing industry and the Church.

### **Prior Knowledge & Skills**

- use of the windowed workstation environment and an Internet web browser
- understanding that there are always different sides to an issue and tolerance of opinions is required

### **Teaching/Learning Strategies**

The teacher:

- establishes a mood for the activity by first giving samples of news articles regarding rising crime rates, and ways criminals are avoiding prosecution because of “constitutional rights”;
- discusses the proliferation of information on every individual that is stored in electronic format and the “services” that have appeared as a result of this electronic information (e.g., Net Detective);
- discusses the Canadian Freedom of Information Act as it exists. The issue of no international Freedom of Information Act is also discussed;
- discusses the dynamics of communication in group work situations;
- instructs students on criteria and methods of validating webpages, including: Who wrote the pages? What does the author say about the subject? Does the author have the authority to present this information? Does the author have anything to gain? When was the site created and updated? Where does the information come from? Can the information be verified in book, periodical, or other source?
- prepares and distributes a document or handout with the debate hypothesis (Appendix 2.4.1);
- explains the topic of the debate and the process by which the research is presented, debated and summarized in a final individual student assignment;
- gives instruction on the use of the presentation graphics software, including backgrounds/master slides, importing slides from other presentations, slide timings, speaker’s notes, on-line collaboration, and using a variety of sound files;
- emphasizes the importance of creativity and innovation in creating business presentations;
- instructs students on the debate protocols and the importance of anticipation and preparation in a debate or a presentation;
- assigns specific students to each of the two debating sides. The teacher can establish groupings that facilitate peer support, positive leadership, and group dynamics;
- holds a draw to decide which position each side will support;
- adjudicates for the debate;
- marks presentation and summary assignments.

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Students:

- in pairs, search, accumulate, cite, and organize information supporting their position. Each pair submits a summary of all the information they found (Students are paired so that peer mentors can assist students who require additional support.);
- in pairs, create using presentation graphic software a presentation covering the points that they have found. These slides are for content only and do not yet have any special formatting or special effects. The first slide in each presentation must contain the names of student authors. Accommodations for different learning styles will be implemented in these individual assignments. Presentations are saved in a common directory (one for each position);
- study what each of the other groups have done and prepare in writing a report for each group indicating each presentations best slide and why (about one or two sentences for each presentation);
- based on the input received by each pair, determine their best slide and shows it on the computer screen. The team as a whole selects the information most appropriate for their debate presentation. Four of the team members are chosen to put the selected slides in one presentation (unformatted);
- create, in a word-processed document, the five most beneficial sites/resources for their research and give a brief statement of one or two lines about what information will be found at that site;
- take the new draft of the presentation and format the presentation so that it could be used as part of the initial presentation to the debate to indicate their position and their major arguments. The running times for each presentation should be three to four minutes. Each presentation is submitted to the teacher for evaluation. Consideration for students with special needs are made if required;
- in teams meet once more as a group to select which of the presentations they choose to use in the debate and if necessary make any revisions. Each team receives ten minutes for their presentation, four minutes for a rebuttal, and one minute for summation;
- prepare individual word-processed summaries of the debate, indicating the important issues regarding either position and citing their five most beneficial sites as part of a properly formatted bibliography. Students should suggest ways that they could appropriately “act upon” injustices to human dignity, rights, and social system that became evident as a result of this activity. This becomes a major component of this activity’s evaluation;
- submits three peer assessment evaluations each regarding their own contribution and the contribution of others to this group activity (see Appendix 2.4.5).

### **Assessment & Evaluation of Student Achievement**

The teacher and students gather assessment information based on the specific expectations, including:

- assessment of the initial accumulated information is done using the rubric in Appendix 2.4.2;
- evaluation of the student slide presentation is done using the rubric in Appendix 2.4.3;
- summative evaluation of the Security, FOI Activity is done using the rubric in Appendix 2.4.4;
- peer assessment form to assist students in objectively evaluating their relative contribution to the project (Appendix 2.4.5).

### **Accommodations**

The following are ways in which the activities can meet student’s individual needs.

- Pair students to provide peer support for students with lower software and research skill development.
- Provide computer access outside of class time.
- Provide for individual assessment but group support.
- Student notes are reviewed to ensure an understanding of the topic and accurate study resources.
- Provides additional enrichment opportunity for students with greater background knowledge to demonstrate their communication and software application skills.

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## Resources

[www.opengovernmentcanada.org](http://www.opengovernmentcanada.org)

[www.freedomfoundation.com](http://www.freedomfoundation.com)

<http://insight.mcmaster.ca/org/efc/pages/chronicle/censor.html>

## FOI Resources

<http://www.freedomforum.org>

<http://spj.org/ethics/code.htm>

<http://www.buildfreedom.com/>

<http://www.cfoi.org.uk/opengov.html>

<http://www.nato50.org/posts/ja3/www2foi.html>

<http://listserv.syr.edu/archives/foi-l.html>

[http://www.comlaw.utas.edu.au/law/foi/bookmarks/FOI\\_index.html](http://www.comlaw.utas.edu.au/law/foi/bookmarks/FOI_index.html)

<http://sprinks-clicks.about.co...heaton/detective/detective.htm>

## Activity 5: Copyright/Plagiarism/Software Piracy

**Time:** 300 minutes

### Description

The activity begins with a definition of “copyright” and examples of copyright infringement. After defining “software piracy” students scan the Internet and answer the following question: “Is software piracy real? Why or why not?” The teacher defines the term “plagiarism” and incorporates the topic of plagiarism using the MLA (Modern Languages Association) essay format that emphasizes the need to confer credit where applicable. Students are then given a case study concerning a student who downloaded an essay for his/her English class and made some revisions to the text to disguise the origin of the essay before submitting the essay as his/her own work. Students assume the role of the teacher who suspects that the essay has been plagiarized. (Apparently, the student has not previously demonstrated the high quality of effort that the essay indicated.) How should you handle the situation?

### Strand(s) & Learning Expectations

**Ontario Catholic School Graduate Expectations:** CGE1d; CGE2b; CGE2c; CGE3c; CGE3d; CGE4b; CGE4f; CGE5g.

### Overall Expectations

IIV.03 - summarize the legal, ethical, social, environmental, and health and safety issues related to the use of information technology;

ERV.01 - demonstrate the use of electronic media to find relevant information.

### Specific Expectations

ER2.02 - follow copyright and licensing rules and regulations when accessing information electronically;

EB2.02 - describe the laws that protect consumers and businesses who do business electronically (e.g., customs regulations, international trade agreements, fraud laws, copyright laws);

SI2.03 - organize their work, taking into consideration priorities, the quality of the documents, and time management.

### Prior Knowledge & Skills

Students have:

- keyboarding skills, experience with the use of a mouse, and knowledge of word processing;
- simple Internet search skills and knowledge of how to download information from the Internet.

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## Planning Notes

- Prepare examples of global and local search engine techniques to access information such as Boolean search techniques and use of metasearch engines (addressed in Unit 1).
- Prepare Plagiarism (electronic file) – Appendix 2.5.2
- Prepare Checklist - Use of MLA format in a sample essay (Appendix 2.5.3)

## Teaching/Learning Strategies

### Activity 5.1 - Copyright and Software Piracy

The teacher:

- reviews effective Internet search and download techniques from the Internet;
- demonstrates how to summarize and reference Internet information on software piracy.

Students:

- search for information on software piracy and acknowledge the source site by including the link that references the information provided;
- create a summary for each site and state why the site was unique.

### Activity 5.2 - Plagiarism

The teacher:

- reviews website on MLA format, then hands out Appendix 2.5.2 – Plagiarism and instructs students to format the essay using correct MLA format.
- instructs the students to create a two-paragraph essay in MLA format indicating the steps they would take to deal with the incident of plagiarism.

Students:

- open the essay titled Plagiarism and format it in proper MLA format;
- read the material presented in the essay Plagiarism;
- create a three- or five-paragraph essay in MLA format (with introduction-body-conclusion) indicating the steps they would take to deal with the case of alleged plagiarism. (Students requiring enrichment opportunities further research the topic of copyright or plagiarism, relating their findings to the Catholic teachings discussed in this unit, and present their research via MLA essay style.)

## Assessment & Evaluation of Student Achievement

- Formative assessment includes a checklist (Appendix 2.5.1)
- Formative assessment on Plagiarism file includes a checklist (Appendix 2.5.3)
- Formative assessment of the Essay includes a checklist (Appendix 2.5.4)
- Summative evaluation of final copy

## Resources

[www.csus.edu/owl/index/index.htm](http://www.csus.edu/owl/index/index.htm)

[www.epbc.edu/disted/highlites.html](http://www.epbc.edu/disted/highlites.html)

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## Appendix 2.1.1

### Checklist –Table

Number of columns: 3	Y	N
Number of rows: 5	Y	N
Merge cells in top row	Y	N
Outside border: 4½ thick	Y	N
Inside border: 1½ dashed	Y	N
Left column width: 2.5"	Y	N
Centre column width: 2"	Y	N
Right column width: 2.5"	Y	N
Title of table: Arial Black 11 pt.	Y	N
<b>Column headings</b>		
Font: Bauhaus 93	Y	N
Font style: Italic	Y	N
Size: 12 pt.	Y	N
Font colour: blue	Y	N
Shading: yellow	Y	N
Table Alignment: Centre	Y	N
Vertical alignment: Centre	Y	N

### Activity Sheet - Security Policies and Procedures

Rule	Infraction	Rationale (Remedy)
Student's Name	Student's Name	Student's Name

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## Appendix 2.2.1

### Core Ethical Values

The core ethical values for making ethical decisions (based on the Six Pillars of Character found at the Josephson Institute of Ethics website):

- a. Trustworthiness – This includes honesty (no intentional misrepresentation of facts, no half truths), frankness, integrity (not caving in to temptation), reliability (keeping promises or commitments) and loyalty (there are limits to it, often must be ranked)
- b. Respect – we should exercise courtesy, civility, tolerance and decency
- c. Responsibility – accountability, doing one’s best, perseverance, self-restraint
- d. Fairness – gathering and evaluating information necessary for decision-making, lack of favouritism or prejudice, equity
- e. Caring – empathizing with others, not causing any more harm than is necessary
- f. Citizenship – obeying laws, being a contributing member of society

## Appendix 2.2.2

### Ethical Rationalizations

- End-justify-the-means reasoning
- Cost of doing the right thing versus the cost of not doing it
- Legality is the only criteria of ethics
- Little white lies - everyone deserves the truth
- If the person with whom you are dealing lies/cheats, etc., it is fine for you to do so
- It doesn’t hurt anyone it’s ethically appropriate, e.g., nepotism, asking for favours for yourself
- Everyone’s doing it, therefore it must be okay
- It’s fine if I don’t gain personally (Personal gain is not the only test for unethical behaviour).
- They owe me (I am overworked and underpaid and deserve some “extras”).

## Appendix 2.2.3

### Quote from Pope John Paul II’s *On The Culture of Life and the Culture of Death*

“as we approach the new millennium, we need to meditate deeply on the signs of a new spiritual crisis, whose dangers are apparent not only at the personal level but regarding civilization itself. If this crisis deepens, utilitarianism will increasingly reduce human beings to objects for manipulation. If the moral truth revealed in the dignity of the human person does not discipline and direct the explosive energies of technology, a new era of barbarism, rather than springtime of hope, may well follow this century of tears. ... Because the spiritual crisis of our times is in fact a flight from the transcendent mystery of God, it is at the same time a flight from the truth about the human person, God’s noblest creation on earth. The culture of our day seeks to build without reference to the architect. ... The greatest contrast between the Gospel vision and contemporary culture is in the dramatic conflict between the culture of life and the culture of death.” - (October 24, 1998)

## Appendix 2.2.4

### Checklist for School Computer User Policy

5 School Policy Items identified	Y	N
5 Reasons for Inclusion discussed	Y	N
5 Ethical Value(s) Considered identified	Y	N
Difference identified for large corporations	Y	N
Individual rights vs. group rights considered	Y	N

## Appendix 2.2.5

### Global Usage Agreements Columns Assignment

Category/Criteria	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge and Understanding</b> Identifies similarities and differences in policies	- limited ability to identify similarities and differences	- some ability to identify similarities and differences	- considerable ability to identify similarities and differences	- always able to identify similarities and differences
<b>Communication</b> Demonstrates ability to communicate ideas clearly	- information communicated with limited clarity	- information communicated with moderate clarity	- information communicated with considerable clarity	- information communicated with high degree of clarity and confidence
<b>Thinking/Inquiry</b> Demonstrates comprehension of similarities/differences in policies with examples	- demonstrates limited comprehension	- demonstrates some comprehension	- demonstrates considerable comprehension	- demonstrates complete comprehension
Identifies appropriate consequences for not following policies	- limited ability to identify appropriate consequences for not following policies	- some ability to identify appropriate consequences for not following policies	- considerable ability to identify appropriate consequences for not following policies	- always able to identify appropriate consequences for not following policies
<b>Application</b> Use of columns of differing widths Use of logos spanning more than one column	- uses program components with limited ability	- uses program components with some ability	- uses program components with considerable ability	- uses program components with high degree of ability

**Note:** A student whose achievement is below level 1 (50%) has not met the expectations for this assignment or activity.

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## Appendix 2.2.6

### Ethical Case Studies

**Note:** In all cases “Responses should include a clearly stated and supported reason for answers or decisions.”

**Case 1** - You are experiencing pain and enter the hospital for tests. A computer is used to assist in testing and diagnosis. The computer indicates that you must have your right kidney removed. Once the kidney is removed, it is discovered that the kidney was, in fact, fine. How do you feel? Who is at fault – the doctor, the computer, the program writer, you? What will you do now?

**Case 2** - Worker #1 does not have Internet access at home. He/she spends time at work on the Internet receiving and sending personal e-mail messages from family and friends. The company he/she works for does not have the capacity to store large volumes of data. How much time is acceptable for “personal” business during the work day? What types of materials are acceptable for e-mail? Should there be a limit if work computers are being used? Should the e-mail be monitored by the system administrator?

**Case 3** - You have been asked to prepare invitations and a “program” for your sibling’s wedding. This would mean you would have to use the computers, printer, and photocopiers at your workplace, since you do not have the resources to do so at home. You have always been a good worker for the company. What are the issues involved in this case? Is it acceptable to do as your sibling wishes? Why or why not?

**Case 4** - Your place of employment has a limited number of phone lines. You often have to make personal phone calls because most places of business match your own work hours. Is it acceptable to use the phone lines for personal business? Why or why not? If you feel it is acceptable, would there be any circumstances under which it would not be acceptable? If you feel it is not acceptable, are there any circumstances under which it would be acceptable?

**Case 5** - An enterprising student has begun using school computers to run an Internet business. He/she uses school computers to earn extra spending money. Is this an ethical use of resources? Is this a legal use of resources? What factors should be looked at?

**Case 6** - A co-worker accidentally e-mails you a file entitled “Journal.” You open it and discover that the co-worker likes a friend at work but is too shy to say anything. The file also contains references to inappropriate and potentially illegal activities of another co-worker. Should you say anything to anyone?

**Case 7** - You have been issued a company truck. You are allowed to drive the truck to and from work and to use it for transportation between job sites. A friend asks you to use the truck to help him/her move to a town several hours away. The move will necessitate several trips, but you will pay for your own gas. Should you help your friend move? Why? Why not?

**Case 8** - You are the supervisor of a group of workers in an office setting. One of the ladies in the office becomes pregnant. Her job involves the use of computers for the full working day. She brings in an article which seems to prove that electromagnetic radiation from computer screen can have a detrimental effect on her developing baby. She requests a reassignment of duties for the duration of her pregnancy. This would mean a hardship for your company. What should you do in this case?

**Case 9** - Your friend has asked you to assist them with an project for one of their classes. The subject is one in which you are interested. Your friend is barely passing the course and will most likely fail (so he/she tells you) if you do not help them. Should you help them? If so, to what extent? Why or why not?

## Appendix 2.2.7

### Ethics Case Study Presentation Rubric

Category/Criteria	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge/ Understanding</b> Social, legal, political, cultural, and environmental implications of IT use	- limited ability to identify ethical implications	- some ability to identify ethical implications	- considerable ability to identify ethical implications	- strong ability to identify ethical implications
<b>Communication</b> Presentation of research and reflection	- information communicated with limited clarity	- information communicated with moderate clarity	- information communicated with considerable clarity	- information communicated with high degree of clarity and confidence
<b>Thinking/Inquiry</b> Content	- limited connections made to Catholic teachings and extension of ideas beyond case	- some connections made to Catholic teachings and extension of ideas beyond case	- considerable connections made to Catholic teachings and extension of ideas beyond case	- strong connections made to Catholic teachings and extension of ideas beyond case
Reflection content Demonstrating specific idea development	- limited and superficial demonstration of idea development	- some breadth and depth of thought	- good depth and breadth of thought	- insightful and thorough breadth and depth of thought
<b>Application</b> Use of transitions, graphics, charts, bulleted text, and appropriate choice of fonts	- limited use of features taught	- some use of features taught	- effective use of features taught	- exemplary and creative use of features taught

**Note:** A student whose achievement is below level 1 (50%) has not met the expectations for this assignment or activity.

## Appendix 2.3.1

### Rubric for Netiquette Website Activity

Category/ Criteria	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge/ Understanding</b> - of the business, legal, social, and philosophical issues	- demonstrates limited understanding of different business, social, legal, philosophical issues	- demonstrates some understanding of different business, social, legal, philosophical issues	- demonstrates considerable understanding of different business, social, legal, philosophical issues	- demonstrates thorough and insightful understanding of different business, social, legal, philosophical issues
<b>Thinking/ Inquiry</b> - reflects clarity of issues defined	- demonstrates limited ability to clarify business, social, legal, philosophical issues	- demonstrates some ability to clarify business, social, legal, philosophical issues	- demonstrates considerable ability to clarify business, social, legal, philosophical issues	- demonstrates thorough ability to clarify business, social, legal, philosophical issues
<b>Communication</b> - ability to describe clearly to others	- communicates relevant ideas in own words with limited clarity	- communicates relevant information in own words with some degree of clarity	- communicates relevant information in own words with considerable degree of clarity	- communicates relevant information in own words with exceptional degree of clarity and insight
<b>Application</b> - ability to use the technology to communicate efficiently	- employs copy/paste, bullets, numbering functions to a limited degree	- employs copy/paste, bullets, numbering functions to a moderate degree	- employs copy/paste, bullets, numbering functions to a significant degree	- employs copy/paste, bullets, numbering functions confidently

**Note:** A student whose achievement is below level 1 (50%) has not met the expectations for this assignment or activity.

## Appendix 2.3.2

### Rubric for Evaluation of Web Pals Activity

Category/ Criteria	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge/ Understanding</b> - netiquette concepts	- demonstrates limited knowledge of netiquette concepts	- demonstrates some knowledge of netiquette concepts	- demonstrates considerable knowledge of netiquette concepts	- demonstrates thorough knowledge of netiquette concepts
<b>Thinking/ Inquiry Communication</b> - includes netiquette concepts in communicating messages	- uses thinking skills with limited effectiveness	- uses thinking skills with moderate effectiveness	- uses thinking skills with considerable effectiveness	- uses thinking skills with a high degree of effectiveness
<b>Application</b> - use of e-mail function	- employs e-mail functions to limited degree	- employs e-mail functions to some degree	- employs e-mail functions to a considerable degree	- employs e-mail functions to a high degree

**Note:** A student whose achievement is below level 1 (50%) has not met the expectations for this assignment or activity.

## Appendix 2.4.1

### Topic Hypothesis

#### Facts

- Technology has given society instant access to more information than ever before in human history.
- There is a massive storage of information about virtually all aspects of each individual's life stored in electronic format through credit cards, bank accounts, buying habits and purchases, ownership and warrantee records, etc.
- Because of increased cash card usage, and on-line purchasing, etc., it is expected that the amount of this type of information will grow.
- Crime is reported to be increasingly more prevalent in societies today.
- Many Criminal activities are hidden or cannot be prosecuted because of freedom of information laws. Some theorists maintain that if everyone in society had access to all electronic information on everyone that Crime would cease to exist. Criminals commit crimes because they feel that they won't get caught. If criminals knew that they would be caught, they would not commit crimes. Virtually all crime is attributed to gaining some sort of financial benefit. No one would steal if everyone knew where the money went; because there are electronic records of any benefits acquired, all criminals would be caught. Financial records are easy to trace if they are not protected under the Freedom of Information Act.

*Debate Question:* Should freedom of information laws and an individual's right to privacy be removed to facilitate the establishment of a crime-free society?

## Appendix 2.4.2

Category/ Criteria	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge/ Understanding</b> - efficient use of Internet search engines	- demonstrates limited knowledge of Internet search techniques	- demonstrates some knowledge of Internet search techniques	- demonstrates considerable knowledge of Internet search techniques	- demonstrates a thorough knowledge of Internet search techniques
<b>Thinking/ Inquiry</b> - to solve Internet search problems	- uses thinking skills with limited effectiveness	- uses thinking skills with moderate effectiveness	- uses thinking skills with considerable effectiveness	- uses thinking skills with a high degree of effectiveness
<b>Communication</b> - preparation and delivery of report on Internet search	- limited ability to prepare a report	- some ability to prepare and communicate a report	- communicates a report with considerable effectiveness	- communicates a report with a high degree of effectiveness
<b>Application</b> - finding resources	- demonstrates limited ability to find suitable resources	- demonstrates some ability to find suitable resources	- demonstrates considerable ability to find suitable resources	- able to find excellent resources

**Note:** A student whose achievement is below level 1 (50%) has not met the expectations for this assignment or activity.

### Appendix 2.4.3

Category	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge/ Understanding</b> - of presentation software	- demonstrates limited knowledge of presentation graphic software	- demonstrates some knowledge of presentation graphic software	- demonstrates considerable knowledge of presentation graphic software	- demonstrates a thorough knowledge of how to use presentation graphic software
<b>Thinking/ Inquiry</b> - planning a presentation	- demonstrates limited ability to plan a presentation	- demonstrates some ability to plan a presentation	- plans presentations with considerable effectiveness	- plans presentations with a high degree of effectiveness
<b>Communication Application</b> - creating a presentation	- demonstrates limited ability to create a presentation using software	- demonstrates some ability to create a presentation using software	- demonstrates considerable ability to create a presentation using software	- creates an excellent presentation using software

**Note:** A student whose achievement is below level 1 (50%) has not met the expectations for this assignment or activity.

### Appendix 2.4.4

Category	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge/ Understanding</b> - of security and FOI issues	- demonstrates limited knowledge of security/FOI issues	- demonstrates some knowledge of security/FOI issues	- demonstrates considerable knowledge of security/FOI issues	- demonstrates a thorough knowledge of security/FOI issues
<b>Thinking/ Inquiry</b> - demonstrates security and FOI awareness	- uses thinking skills with limited effectiveness to demonstrate security and FOI awareness	- uses thinking skills with some effectiveness	- uses thinking skills with considerable effectiveness	- applies thinking skills comprehensively
<b>Communication</b> - summarizes information	- demonstrates limited ability summarizing information	- demonstrates some ability summarizing information	- demonstrates considerable ability summarizing information	- summarizes information comprehensively
<b>Application</b> - applies FOI concepts	- limited application of FOI concepts evident	- some application of FOI concepts evident	- considerable application of FOI concepts evident	- a thorough understanding of FOI concepts

**Note:** A student whose achievement is below level 1 (50%) has not met the expectations for this assignment or activity.

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### Appendix 2.4.5 – Peer Group Evaluation

What percentage of the work done was done individually by each group member? The total should be no more than 100% Each student hands in privately the information for one column and signs the submission. **Note:** Assessment must consider evidence of, listening, sharing ideas and problem solving. This is an example.

	Bill's Assessment	Sue's Assessment	John's Assessment	Totals for Teacher Consideration
Bill	40	35	40	115
Sue	30	40	35	105
John	30	25	25	80
Totals	100	100	100	

The totals help the teacher understand the relative work contributions by the group that may not have been evident during the class.

### Appendix 2.5.1 – Checklist –Software Piracy

Websites (4)	Y	N
Correct citation format	Y	N
Include links with each site	Y	N
Concise and accurate summary for each site	Y	N
Summary – What makes this site unique?	Y	N

### Appendix 2.5.2 – Plagiarism

(P)Plagiarism is the theft of words and/or ideas from another for which the writer takes credit. The most apparent misconception that students possess is that rewriting material is not plagiarism because they are “putting it in their own words.” (Spears) Plagiarism is becoming an increasingly difficult problem to crack because of one major reason: the Internet. The Internet features many sites that offer term papers for secondary school, college and university students who wish to download a paper that is not of their creation. (P) Prior to the advent of the Internet, a student risked the label of plagiarism if the teacher or professor could prove that a portion of the aforementioned student’s term paper was rewritten in his/her own words while stealing ideas from another source. Sites including research-assistance.com pride itself on selling a vast array of term papers; the only draw back is the price that a person must pay a specified dollar amount for each page. Its selling point includes the following sales pitch to students experiencing ‘time constraints’: (P) We know that academic demands can be overwhelming. Today’s student must often balance time between work, study, class, research, and writing. Research Assistance reports can be an effective time management for the study, research, and writing that academic institutions require. Furthermore, the reports can be used by students as a template for producing a well-constructed term paper. (Hazel) (P) Academia has fought back with its own sites including Plagiarism.com to inform (and sell) successful strategies on combating plagiarism on the Internet. These sites specifically denounce the acquisition of work from commercial sources as unethical and therefore to be treated as plagiarism (Spears). (P) With the onslaught of sites selling term papers under the guise of ‘templates’, plagiarism is alive and growing. Original thought is the enemy; time management is the hero and an ”A” paper is the ultimate goal regardless of its origin.

Works Cited: Hazel. “Research Assistance.” *Online*. <http://www.research-assistance.com/cgi-bin/hazel-cgi/hazel.cgi> Spears, M. “Plagiarism Q & A.” (4 Feb 2001) <http://www.ehhs.cmich.edu/~mspears/plagiarism.html> (24 Jan. 2001)

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### Appendix 2.5.3

#### Checklist (Electronic File - Plagiarism)

Top Margin = .5"	Y	N
L/R Margins = 1"	Y	N
Font: Times New Roman 12 pt	Y	N
Justification: left	Y	N
Line Spacing: double	Y	N
Correct Header	Y	N
Line 1: Your Full Name	Y	N
Line 2: Teacher's Name	Y	N
Line 3: Course Code	Y	N
Line 4: Due Date	Y	N
Line 5: Title (centred)	Y	N
First line indents	Y	N
3rd paragraph quote	Y	N
Citations	Y	N
Works Cited Page	Y	N

### Appendix 2.5.4

#### Checklist – Research Essay

Correct Margins	Y	N
Correct Font	Y	N
Correct Justification	Y	N
Correct Line Spacing	Y	N
Correct Header	Y	N
Line 1: Your Full Name	Y	N
Line 2: Teacher's Name	Y	N
Line 3: Course Code	Y	N
Line 4: Due Date	Y	N
Line 5: Title (centred)	Y	N
First line indents	Y	N
Correct format of Citations	Y	N
Works Cited Page (at least two websites)	Y	N