## **CIS1000DE OUTLINE Fall 2016**

## Welcome

Today, information is the most valuable commodity in the world and those who can create, interpret, manipulate, and extract useful information from the mountains of data that exist have influence and power.

CIS1000 is designed to provide you with the background you need to survive and prosper in a world transformed by information technology. You will learn the basics of information technology, from multimedia PCs to the Internet and beyond. You will explore how computer and networks are used as practical tools to solve a wide variety of problems and discuss how computer technology affects your lives, our world and future. At a very rapid pace, technology is advancing. Software is becoming easier to use and noticeably more powerful. Also, the Internet is growing, not just in the number of web sites available but in the number of computers and networks attached to it. With such rapid and often unsecured change the potential for illegal or unethical use of computers is staggering. Often the users of these technologies do not understand the legal implications of their actions; nor do they consider the ethical situations associated with their online activities. We will discuss the ethical ramifications of a number of technological issues several times during the course.

It is widely accepted that the Internet is still in its infancy and many speculations and predictions have been made with respect to its future influences on Society, Business, the Arts, Science, Medicine, Transportation, etc. We will investigate some examples of how computers and the Internet have affected our lives in the above areas and discuss potential advances in the future.

A useful selection of topics of particular interest such as purchasing a new computer and computer related health issues will be investigated in the later half of the course. Successful Artificial Intelligent (AI) research focuses on making computers do things at which people generally are better. All programs employ a variety of techniques, including searching, heuristics, pattern recognition, and machine learning, to achieve their goals. Many experts believe that people will eventually create artificial beings that are more intelligent than their creators. Finally, the course will expand your knowledge to the future computers.

# **Course Description and Learning Outcomes**

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### **Course Description**

This course provides a survey of computer systems and software, including an introduction to computer programming, data organization and the social impact of computing. The course contains an emphasis on application packages for personal and business use.

### **Learning Outcomes**

By the end of this course you should be able to:

- Identify and describe basic hardware components of computer systems;
- Articulate and discuss the use of programming, databases, networks, the Internet, and information systems;
- Identify and discuss major operating system functions;
- Identify, discuss, and demonstrate usage of the various functions of computer applications, including word processing, spreadsheets, presentation, and database software;
- Design and develop a website using HTML, style sheets, and multimedia technologies;
- Discuss and explain the social, ethical, and legal issues associated with computing and emerging technologies;
- Explain how to evaluate the quality of resources discovered online for their accuracy and reliability;
- Develop an ePortfolio including selected artifacts and supporting learning reflections.

## **Textbook and Course Materials**

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For this course, you will need to the following resources:

## **Required Textbook**

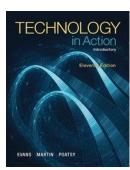
**Technology in Action**, Complete

Edition: 13th

Author(s): Alan Evans, Kendall Martin and Mary Anne Poatsy

Published by: Prentice Hall

You may purchase this textbook at the <u>University of Guelph Bookstore</u> or the <u>Guelph Campus Co-op Bookstore</u>.



#### **Course Website**

The course website acts as your classroom. There are a variety of course content, texts, graphics, videos, learning activities, and other relevant information provided within each unit and lab section. You will also find the links to suggested online resources through out the course. It is recommended that you log in to your course website everyday to check for announcements, access course materials and lab activities, review weekly schedule and assignment requirements, participate in online discussions, and take quizzes.

## **Technical Requirements**

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You are expected to have an understanding of Internet and email basics. You will be navigating and searching the Internet and corresponding with others in your class using web-based conferencing and email.

Please ensure that your computer system meets the Minimum Requirements.

If you do not have these technical requirements, consider either upgrading your personal computer, or using a machine on campus. Trying to use someone else's computer for the course may prove to be frustrating and difficult. Please follow this quick <a href="System Check">System Check</a> to determine if you have the right setup. (Results will be displayed in a new browser window).

## **Course Structure**

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This 12-weeks course is designed to provide you with the fundamentals of information technology – from multimedia, PCs to the Internet and beyond. Each week will be divided into two main parts. The first part will be **unit work** – your engagement with online readings, resources, and activities proposed in a respective unit. In the second part, you will be expected to **participate in lab activities** designed to acquire and/or improve your technology skills. Material covered in the online Labs will be included in major projects of the portfolio assignment and final examination in this course.

#### **UNIT WORK**

Each unit will take you through a review of most current concepts and issues in computing, as well as provide you with knowledge of state-of-the-art technology you need to prosper in today's digital age. The units are as follows:

Unit 01: Why computers matter to you

Unit 02: Understanding computers and their parts

Unit 03: The Internet and the Web

Unit 04: Application and system software

Unit 05: Computer hardware

Unit 06: Networking

Unit 07: How the Internet works

Unit 08: Digital devices and media

Unit 09: Computer security

Unit 10: Software programming

Unit 11: Databases and information systems

Unit 12: Networking and security

The main learning components of unit work are:

- Reading learning materials off the course website and from the textbook;
- Applying concepts learned by doing self-guided activities;
- Participating in online discussions;

Completing assignments and online quizzes.

**Self-guided activities** take the form of reflections on reading, practice exercises, self-assessment, and practice quizzes. These activities are designed to help you gauge understanding of the materials covered in the unit. While these activities are not graded, engagement in those activities may help you verify knowledge, reflect on your learning experience, and build skills towards meeting the course learning outcomes. Details on these activities will be provided within each of the learning units on the course site.

The course has many **online discussions** where you can interact with your classmates and course instructor at your convenience. There are two types of online discussion in this course:

- **Optional discussions** are set up for you to connect with your classmates, instructor, and TAs for many purposes. These discussions are not graded and designed to assist you in relating the concepts to your learning. You can also lead the creation of non-content information with discussions. Both your classmates and instructor will participate in these discussions. For a full list of discussions, visit the **Discussions** link in the Nav Bar.
- Graded discussions where you will be asked to engage critically in discussions of the course content and
  readings. There are three (3) required discussions in this course. A description of the graded discussions is
  provided on the Assignments page.

During this course, you will be asked to compile and submit a **portfolio of five (5) projects** that will demonstrate that you have developed a set of technical competencies in using various functions of computer applications and website design. Each project of the portfolio must be submitted individually via **Dropbox** located in the Navbar. A full description of the portfolio assignment and its components is given on the **Assignments** page.

There are four (4) graded **online quizzes** for this course. They usually consist of a series of multiple choice questions. For more details on quizzes, visit the **Assignments** page.

#### **ONLINE LAB ACTIVITIES**

The online **Labs** component is a vital part of this course as it provides an opportunity for you to learn through practice about core Microsoft Office software, website development, and/or JavaScript programming language. This Lab focuses on active hands-on exploration and development of practical computer skills that you will need to complete your portfolio projects and final examination in this course.

This lab is organized into six (5) lab sections:

- Lab 1: Microsoft Word;
- Lab 2: Microsoft Excel;
- Lab 3: Microsoft PowerPoint;
- Lab 4: Website Development; and
- Lab 5 (Option A): Microsoft Access, or
- Lab 5 (Option B): JavaScript Programming.

Note that you have two options for Lab 5. Choose the option that is relevant to Project 5 you have selected for your portfolio assignment.

Before you start your first lab section, it is recommended that you review the "Guide" section to learn about how to navigate through each lab effectively. Once you complete the Guide, you can start your first lab that is Lab 1: Microsoft Word.

For more details on online lab activities, select the **Labs** link located in the Navbar.

#### **IMPORTANT NOTE:**

Visit the **Schedule** page for specific due dates and times. If you have any questions, please contact your instructor.

Note: It is strongly recommended that you follow the course **Schedule** located in the Navbar. The **Schedule** outlines what you should be working on during each week of the course. By following the **Schedule**, you will be better prepared to complete course assignments and will be able to succeed in this course.

## **Method of Evaluation**

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During the semester you will be required to participate in online discussions, work on portfolio assignment, complete lab activities and online quizzes. There will be a final exam at the end of the semester. Visit the Assignments link for details about each assignment listed below.

The following table outlines the assignments that you are responsible for throughout the semester.

Assessment Scheme	
Assignment	Weight
Online lab forms	2%
Portfolio assignment (5 projects)	37%
Online discussions and report	10%
Online quizzes (4 x 5%)	16%
Final Exam	35%
Total	100%

Note: For specific assignment and quiz due dates, see the **Schedule** link in Nav bar.

## **VIEWING GRADES**

Unofficial assignment marks will be available on the **Grades** page of the course website.

## **Course Expectations and Learning Strategies**

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This is a fully online course that differs in a number of ways from your typical university courses. The online course supports the flexibility in accessing the content and managing your learning and communication with your instructor and classmates. You may do your work at any location and whenever you have the time. However, there are deadlines for assignments that you must meet. You need to keep pace with the course and submit your assignments or participate in online discussions on a schedule set by your instructor.

#### WHERE TO GET STARTED WITH THIS COURSE

Your course website acts as your classroom. Start by navigating through all the course components to become comfortable with the organization of the course and familiar with the course expectations. If you are new to online learning or to this version of Courselink go to the **Start Here** link (located in the upper left portion of the NavBar) to get familiar with various content areas and tools of this site.

Then continue with the course **Outline**. You also need to visit the **Schedule** page where you will find a weekly timeline for the course along with due dates. On the **Assignments** page, you will find out about completing required elements for the course. The **Units** will guide you for each of the 12 weeks of the course. The **Labs** link provides you with access to online lab activities. The **Resources** section of the course website has useful general and course specific information and links. If you have any questions you can ask them in the **Main Class** discussions area.

#### **KEYS TO SUCCEEDING IN THIS COURSE**

To get the most from your learning experience and succeed in this course, you will be expected to do the following:

• Log in to the course site everyday to access all the necessary information and check for new course developments. If you feel lost in the online course environment, don't panic. Look for **News** postings (i.e., instructor's announcements) on your course home page that might give you information about how to proceed.

- Spend approximately 9 to 12 hours per week to complete your work on the course. Remember when you take a regular course on campus; you usually spend 3 hours a week in class and 6-9 hours a week outside of class on homework. All these hours you will need to spend online now.
- **Keep up** with the unit and textbook readings and online lab activities on a weekly basis.
- Participate actively in unit, online lab, and portfolio assignment discussions by posting messages and replying to the discussions on a weekly basis. Because you are part of a community of learners in this course, a lot depends on your participation in course activities.
- Make meaningful contributions to the graded discussions and avoid last minute participation. If you are required
  to provide comments to your classmates' dicussion contributions, you will be letting your classmates down if you
  don't post your replies in a timely manner.
- Use the instructions and criteria list in planning for your projects of the portfolio assignment and review them before you submit your original work for marking. Sadly, high quality work has lost marks simply because the stated instructions were not followed.
- Submit all required assignments on time as specified on the Schedule page. Be sure to check the technical requirements and make sure you have the proper computer, that you have a supported browser, and that you have reliable Internet access. Remember that technical difficulty is not an excuse not to turn in your assignment on time. Don't wait until the last minute as you may get behind in your work.
- Complete a *practice quiz* before attempting a *graded quiz*. Although it will have no affect directly on your final grade, the experience will be beneficial to you as it confirms your knowledge.
- **Ask questions** of your instructor, TAs, and classmates in order to find solutions to issues with which you are unfamiliar.

- Determine and implement effective time management skills for this course. Read carefully the course schedule
  to help you create a structure for participation and manage your workload in the course. Plan to set aside time each
  week to complete course readings and assignments. Visit the Schedule page to chart out your workload and
  timelines for completion.
- Work hard, or even harder, than in your typical face-to-face course. Assess and make modifications to your learning in order to become an independent learner, with guidance from your instructor. Be prepared for self-study and for monitoring and pacing your learning.
- Make friends and have fun! Because everyone must post messages in the discussions, you can get to know your instructor, TA, and classmates sometimes even better than you do in your regular course. Keep in mind that the more you contribute to your online course, the more you will get out of it.

If you encounter a technical difficulty of any kind, contact your instructor for assistance. You can post your questions in the *Main Class Discussion* located in the **Discussions** area on the Navbar, or you can send your instructor a private email if it is concerning a personal matter. See the *Problems, Questions, Comments* section at the end of the **Outline** for instructor's contact information.

#### **OPTIMIZE YOUR LEARNING WITH WEEKLY ROUTINE**

As mentioned earlier, flexibility and self-regulation are inherent in online learning. They can also be major challenges if you tend to procrastinate or lack time management skills. Therefore you need to set aside uninterrupted time when you are at your best for studying and take responsibility for what you learn and what you do throughout the course. Try to make up a weekly time plan and learn to follow it. Schedule your study throughout the week so that you don't have to finish all assignments in one day, e.g., try to complete Task A by Thursday and Task B by Monday. An ideal combination would be 1-2 learning tasks per day.

You might consider the following as a weekly routine for your study:

- 1. Check for course updates from your instructor in the **News** located on the course home page.
- 2. Review the **Schedule** for assignment due dates and other information.

- 3. Consult the **Assignments** page for requirements.
- 4. Work though the **Unit** and **Lab** section assigned for the week.
- 5. You can bookmark where you are in the course when you leave so that you can return to that place from the **Bookmarks** widget located on the course home page.
- 6. Visit **Discussions** area and participate by asking questions, making comments, or offering support to your classmates.

These are just a few tips that you might find helpful to succeed in this online course. Each of you has different learning styles and preferences, apply those that fit your situation. Good luck with your course!

## **Policies and Resources**

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## **Distance Education and Open Learning Program Handbooks**

### **Degree Credit Students:**

Please ensure that you have reviewed the <u>DE Handbook</u>. In particular, ensure that you review the sections that pertain to Assignment Submissions and Returns, Online Quizzes or Tests and Final Examinations.

### **Open Learning Program Students:**

Please ensure that you have reviewed the Open Learning program Handbook for the specific procedures and policies related to your studies through Open Learning and Educational Support

### **Email Communication**

#### **Degree Credit Students:**

As per university regulations, all students are required to check their uoguelph.ca e-mail account regularly: e-mail is the official route of communication between the University and its students.

## Open Learning Program Students without a University of Guelph email account:

Check your email account (the account you provided upon registration) regularly for important communications, as this is the primary conduit by which the Open Learning and Educational Support will notify you of events, deadlines, announcements or any other official information.

#### **Academic Misconduct**

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The <u>Academic Misconduct Policy</u> is detailed in the Undergraduate Calendar.

# **Problems, Questions, Comments**

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