Chapter 1: Course Overview and Introductory Concepts

In this Chapter, you will learn:
1. The overall structure of the course
2. The introduction to Information Literacy
3. The capabilities of life-long learning
4. The new economy
5. The influences of the new economy
6. The digital divide in the new economy
7. The differences between IL and IT
Overview of the Course BUS110

We all live in an information society with proliferating information resources and drastic changes in our environments. In our everyday life, we confront dramatic challenges coming from the rapidly changing social, political, and economic environments of our society. In order to compete with others, we need to possess the ability knowing the specific skills to information problem solving. In other words, we must be information literate. Because of all these facts, Lingnan University is offering a course Introduction to Information Literacy to our year one students so that our students are able to acquire those information literacy skills (to information problem solving) as early as possible.

1. Course Objectives
   • To foster students’ ability to identify, search, evaluate, use, and present information effectively relevant to decision making and problem solving in their studies
   • To train students to become autonomous learners

2. General Structure of the Course
The overall structure of the course is summarized in the following modules:
   • Chapter 1: Introductory Concepts
   • Chapter 2: Introduction to IT
   • Chapter 3: Impact of Information and Technology on the Economy and the Society
   • Chapter 4: Defining a Topic, Information Needs & Sources
   • Chapter 5: Access of Information
   • Chapter 6: Evaluation of Information
   • Chapter 7: Communication and Presentation of Information
   • Chapter 8: Economic, Legal, and Social Issues for Use of Information

Introductory Concepts

1. Information Literacy

Information literacy (IL) is the skills to information problem solving. To be information literate, our students must be able to:-
• determine the extent of information needed,

• access the needed information effectively and efficiently,

• evaluate information and its sources critically,

• incorporate selected information into one’s knowledge base,

• use information effectively to accomplish a specific purpose,

• understand the economic, legal, and social issues surrounding the use of information; and access and use information ethically and legally.

With these in mind, this course is designed with the aim at equipping you the ability to identify, search, evaluate, use, and present information effectively to address various problems in your daily lives, your academic study and your future profession. The achievement of these capabilities is very important because, in the long run, you will have learned how to learn. You will know how knowledge is organized, how to locate information and to integrate new materials with what you already know to deal with problems for your personal and business needs, and thereby achieve the goal of life-long learning.

2. Capabilities of Life-long Learning

Hardware and Software technologies have been advancing and this is expected to continue. New technologies are being invented. At all times, we are facing new challenges, viz., new usage of hardware, new version of software, new operating systems, and new applications with synergy of hardware and software, etc. Employees are expected to upgrade and add values to themselves through part-time research, on the job training, or attending formal courses. We need to become autonomous learners. In other words, information literacy forms the basis for lifelong learning. It is common to all disciplines and to all learning environments. The acquired skills in information literacy will increase our opportunities for self-directed learning, as we know how to expand our knowledge, ask informed questions, and sharpen our critical thinking and analysis. Since life-long learning is one of the missions of our University, and Information literacy skills have become essential skills in our learning, thus it is important that you, as the first year students, should master these skills at your earliest times so as to benefit yourselves in your subsequent study at Lingnan.
3. The New Economy

Since the development of Internet/WWW, a so-called “new economy” has evolved. The central feature of the new economy has been a higher growth rate of productivity, which in turn has brought faster gains in our standards of living. The upturn of productivity in the second half of the 1990s marked the arrival of the new economy. Much of the improvement in productivity gains since 1995 appears tied to the greater use of information technologies. Occupational employment statistical data also shows a tie of IT spending to productivity gains. Investment in IT can increase productivities of workers in various business sectors.

IT investment has made a tremendous contribution towards the economy for the past decade. Before the dot-com bust in mid-2000, vast amount of resources was invested to IT industry or IT related research. Even after the dot-com bust, the use of IT has still supported exceptional productivity gains despite the economy’s slowdown and recession. The use of various IT skills has penetrated into our daily life. People are using various information technologies when they are at home, at work, and in their entertainment, etc. Previously, the mastering of IT skills may be part of the curriculum in higher education; however, at present moment the inclusion of IT skills has become part of the curriculum in secondary education. No doubt that small child will be using IT skills in early life. The mastering of IT skills has apparently become one of the essential requirements in our education closely following languages and mathematics.

4. Influences in the New Economy

For IT employees, new economy offers both opportunity and risk. The highest skilled IT employees enjoy strong demand for their services and above average compensation packages. On the other hand, less skilled IT employees and some non-IT employees have been confronting a higher chance of being displaced by rapidly evolving technologies.

Even for employees in non-IT jobs (Try to name some examples), knowing how to manipulate basic IT skills has apparently becoming a requirement. IT skill requirements are ever changing and employees are finding that life-long training is needed for long-run economic security. Educators also recognize the growing need for skilled employees and are designing curricula to include basic IT skills training as earlier as in secondary school level.
The penetrating of IT in all aspects in business is affecting the way our labor markets operate. Widespread use of IT has reduced the importance of geographical boundaries and allowed some types of labor services to be provided from practically any location. Businesses can lower their costs by redistributing work to regions or even countries where labor costs are relatively lower. For example, some major banks in Hong Kong had relocated their back office services of their card centre to Mainland China; paging companies have made their paging services away from Hong Kong. IT has also raised education and skill requirements across the board, uplifting many employees to commit to continuous training and skills upgrading. One characteristic is the growth in on-the-job computer use. Growth in computer use is no longer limited to employees in IT producing industries and IT occupations. Employees in a variety of non-IT occupations find themselves increasingly using computers and computerized devices to perform their jobs and more often than not, this requires some upgrading of IT skills. For example, in many financial services occupations, employees use computers for routine accounting and billing as well as more complex financial modeling. Records processing has become automated with records being maintained and transmitted electronically. Real estate agents maintain listings electronically and motor-mechanics use computerized diagnostic devices for auto machinery repair. Almost any occupation that requires research involves the use of IT to search in-house or online databases.

Increased competition and rapid changes in the new economy, along with rising skill requirements, mean employees must be able to adapt quickly to the changing technologies and organizational structures. This will require employees to possess technical skills as well as soft skills such as interpersonal, management and problem solving skills. Long-term prosperity for many workers will therefore depend on their flexibility and their willingness to upgrade their skills (technical and soft skills).

Needless to say, it is clear that all employers are expecting their employees to have certain proficiency in using IT skills in their jobs, and that they are willing to acquire or advance these skills during their employment.

5. The Digital Divide in the New Economy

This is a phase used to describe the idea that people of the society can be divided into two distinct categories: (1) those who have access to technology with the ability to use it and (2) those who do not have access to technology or are without the ability to use it. In this definition, technology includes items such as telephones, television, computers, and the
Internet. Especially with the new economy, employees are being flooded with the use of various types of technologies (hardware/software). However, this “digital divide” phenomenon has been raised as social issue in the society. It has been observed that some of the less fortunate people in the world are unable to take advantage of the technology that has made much of the society prosperous and grown. It is therefore the government and many public and private organizations, with the aim to narrow the gap, have been working in various efforts to bridge the divide between those who have access to technology and those who do not (see Table 1). The objective of the society is to ensure that all citizens, regardless of age, gender, disabilities or the limitations of the technology available, will be provided opportunities for technology access in the new economy.

Table 1: Bridging the Digital Divide

<table>
<thead>
<tr>
<th>Have access to technology</th>
<th>Goal of Society</th>
<th>Do not have access to technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities</td>
<td>Bridging the Digital</td>
<td>Rural areas</td>
</tr>
<tr>
<td>Educated people</td>
<td>Divide</td>
<td>Uneducated people</td>
</tr>
<tr>
<td>Upper-income families</td>
<td></td>
<td>Lower-income families</td>
</tr>
<tr>
<td>More industrially developed nations</td>
<td></td>
<td>Less industrially developed nations</td>
</tr>
<tr>
<td>Non-minority neighborhoods</td>
<td></td>
<td>Minority neighborhoods</td>
</tr>
<tr>
<td>People without disabilities</td>
<td></td>
<td>People with disabilities</td>
</tr>
</tbody>
</table>

In Hong Kong, efforts have been made to bridge the digital divide in the society. Internet can be freely accessed through PCs in some organizations (e.g. MTR stations), shops, fast food restaurants, or public libraries. Broadband Internet access fee through ISP (Internet Service Provider) has become affordable for everyone. Youngsters have more chances to access technologies in their primary/secondary education. WBT (Web-based training), CBT (Computer-based training), and other materials are combined to deliver distance learning (DL) or online learning in tertiary education. Some business companies also offer DL training for their employees. Hong Kong is a small place and is rather condensed; this fact has helped to encourage the growth of networking and access of Internet in this region. Most residential area is benefited with this network coverage. Prices of hardware/software are coming down and can be afforded by the general public. Little but efforts has been made to design PCs for people with disabilities. IT courses are offered to the elderly. The society has recognized the issue of digital divide and has done various efforts to bridge the gap.
6. Information Literacy (IL) and Information Technology (IT)

Students are required to distinguish the concepts between IL and IT. A 2000 report from the Association of College and Research Libraries (ACRL)\(^1\) makes a clear differentiation between these two terminologies. The report states that information technology skills refer to those skills which facilitate an individual to use computers, software applications, databases, and other technologies (hardware/software) to achieve a wide variety of academic, work-related, and personal goals. IT skills enhance productivity. Information literacy, on the other hand, provides an academic framework for understanding (identifying), finding (searching), evaluating, and using information. All these activities, in certain extent, will be achieved in part by proficiency in using information technology skills, in part by sound investigation methods, critical analysis and reasoning. In other words, IT skills are closely related to information literacy, and information literate individuals necessarily develop some technology skills.

When we march into the “new economy” (see Section 3), using IT skills in our daily tasks has become part of our lives. A proficiency in IT has become an essential requirement upon graduation in some tertiary institutions in Hong Kong. However, simply knowing how to use IT skills does not guarantee a thorough understanding and the effective use of information; our students should have the competency in identifying, evaluating, managing, and using information effectively in their problem solving. Therefore, our students, in addition to knowing IT skills, are also expected to master information literacy skills.

7. Microsoft Certificates

Microsoft Corporation offers a number of Microsoft certification examinations that allow any IT professionals to acquire the Microsoft Certified Professional (MCP) credential when they have proved their skills to successfully implement a Microsoft product or technology as part of a business solution in an organization. Please click to http://www.microsoft.com/learning/mcp/OfficeSpecialist/default.asp for your interest. The following is a number of Microsoft certification examinations listed for your reference:

• Microsoft Certified Desktop Support Technician (MCDST)
• Microsoft Certified Systems Administrator (MCSA)
• Microsoft Certified Systems Engineer (MCSE)
• Microsoft Certified Database Administrator (MCDBA)
• Microsoft Certified Trainer (MCT)
• Microsoft Certified Application Developer (MCAD)
• Microsoft Certified Solution Developer (MCSD)
• Microsoft Office User Specialist (MOUS)—Please refer to Appendix E in your Microsoft Office XP text if you are interested in this examination.

Works Cited