

Course Title	:	Introduction to Information Literacy
Course Code	:	BUS110/BUS1110
No. of Credits/Term	:	3
Mode of Tuition	:	Sectional approach
Class Contact Hours	:	3 hours per week
Category in Major Prog.	:	Free Elective
Prerequisites	:	Nil

Brief Course Description

This course is designed to foster a student's ability to select the best computing technology to identify, search, and use the information relevant to decision making and problem solving in their daily lives and professions. The course focuses on the abilities necessary to engage in autonomous and collaborative learning which is essential in today's New Economy.

Aims

The course aims at providing students with concepts and skills relevant to information literacy, as well as promoting a culture of understanding the importance of information and IT literacy in all disciplines.

Learning Outcomes

On completion of this course, students should be able to:

1. Access information efficiently and effectively;
2. Use information accurately and creatively.
3. Recognize the importance of information to a civilized society;
4. Identify ethical behavior in regard to information and information technology;
5. Analyse data privacy and intellectual property issues.
6. Identify the advantages, disadvantages and impact of different kinds of computing technology
7. Describe the historical and landmark contributions of computing technology in various facets of the society (e.g. industry, business, education, healthcare, etc.)

Measurement of Learning Outcomes

- 1 Classroom activities such as group discussions and experiments in computer room will assess students' abilities to identify different issues and use IT effectively. (outcomes 1 to 6)
- 2 Individual project will test students' abilities to analyse problems and solve them efficiently with computing technology. Group project will assess student's abilities to handle more complex cases. Presentation skills, cooperation and abilities to answer questions accurately (in Q&A session) will also be assessed in group project. (outcomes 1 to 6)

- 3 Final examination will be used to assess the students' readiness for autonomous learning of IT in the future and comprehension of the concepts of topics which have been taught in the course. (outcomes 2 to 7)

Indicative Contents

Introduction to Computing

- The New Economy and Digital Divide
- Digital Natives and Digital Immigrants
- Impact of Information on the Economy and the Society
- Careers in the New Economy
- Defining Information Literacy
- Information Literacy and Information Technology Literacy

Basic Knowledge of IT and Applications

- Different components of hardware
- Different types of operating systems
- Examples of IT applications in education, business, government, etc.
- Basic computing hardware, system and application software, types of computer, computing applications

Access of Information

- WWW and the society
- Web-based Search Engines
- Online Database Search Techniques by Disciplines
- Effective Information Search Strategies
- Implementing the selected information search strategies
- Using IT Applications in Creating a Product or Performance (e.g. Desktop Publishing and PowerPoint Applications)
- Collaborative learning using cloud storage, such as Google Drive, and web-based mind map software, such as, mindmup.com

Ethical, Legal, and Social Issues for Use of Information

- Understanding Plagiarism and Its Serious Consequences
- Privacy and Security in All Media (Personal Data (Privacy) Ordinance)
- Authorship, Intellectual Property, Copyright, and Fair Use of Information
- Institutional Policies on Access to Information Resources
- Legal Issues in Information Retrieval, Dissemination, and Use
- Issues raised by detailed databases on individuals and data mining
- Information accuracy
- Professional codes of conduct
- IT-related liability

Health and the environment

- Ergonomics
- Physical and Emotional Health
- Green Computing
- Recycling and Disposal of Computing Equipment

Computing in Industry

- Concept of "Third Industrial Revolution/Digital Revolution".
- Hardware technology: the invention of microprocessor from Intel
- Software technology
- Computer graphics technology: e.g. computer games

- Internet and wireless technology
- 3D printing Technology for design prototyping and medical applications

Computing in Business

- Office automation
- Customer relationship management (CRM)
- Electronic commerce
- Business intelligence and the big data

Computing in Education

- Computer-aided learning (CAL), web-based/blended/hybrid learning, platforms (e.g. WebCT, Moodle),
- Stanford Online, MIT OpenCourseWare, the Khan Academy
- E-learning and m-learning
- wired.com
- Social media in education

Computing in Healthcare

- Electronic health records
- Medical informatics
- Computed tomography (CT scan)

Emerging Technologies

- Emerging Hardware
- Nanotechnology, Quantum and Optical Computers
- Improvements in Wired and Wireless Networking
- Cloud Computing
- Computational Intelligence
- Data Mining
- Telemedicine and Tele-surgery
- Bioinformatics
- Societal Implications of Emerging Technology

Teaching Method

The course will foster stronger ties with students through lecturing, case studies, project assignments, presentations, discussion and demonstration in laboratory. Students will be asked to demonstrate their understanding of the subject through presentation and/or assignment.

Assessment

Students are expected to participate actively in classroom activities. Their performance will be used to assess their abilities. Group projects will be used to assess the students' abilities to handle complex cases. Examination will be used to assess the students' overall comprehension of the course.

Continuous Assessment	70%
<ul style="list-style-type: none"> • Case Studies (or Individual projects) 30% (Assessing outcome 1 to outcome 6) • Group project 40% (with written report and presentation) (Assessing outcome 1 to outcome 6) 	
Final Exam (Assessing outcome 2 to outcome 7)	30%
Total	100%

Course Website

Course materials (projects, presentation slides) and information related to the course will be maintained on the website. Students can access this website through Moodle. Students are advised to check this website frequently.

Required/Essential Readings

Shelly, G. B., & Vermaat, M. E. (2011). *Microsoft Office 2010: Advanced* (1st ed.). Boston: Cengage Learning.

Recommended/Supplementary Readings

Alcorn, P. A. (2002). *Social Issues in Technology: A Format for Investigation* (4th ed.). Upper Saddle River: Prentice Hall.

Association for Computing Machinery. (n.d.). *ACM Code of Ethics and Professional Conduct*. Retrieved from <http://www.acm.org/about/code-of-ethics>

Baase, S. (2012). *A Gift of Fire: Social, Legal, and Ethical Issues for Computing Technology* (4th ed.). Upper Saddle River: Prentice Hall.

Beekman, G., & Beekman, B. (2012). *Digital Planet: Tomorrow's Technology and You, Introductory* (10th ed.). Upper Saddle River: Prentice Hall.

Hjorth, L. S., Eichler, B. A., Khan, A. S., & Morello, J. A. (2007). *Technology and Society: Issue for the 21st Century and Beyond* (3rd ed.). Upper Saddle River: Prentice Hall.

Shelly, G. B., & Vermaat, M. E. (2012). *Discovering Computers* (1st ed.). Boston: Cengage Learning.

Shortliffe, E. H., & Cimino, J. J. (Eds.). (2012). *Biomedical Informatics: Computer Applications in Health Care and Biomedicine* (3rd ed.). New York: Springer.