



UNIVERSITI TEKNOLOGI MARA

CSC134: COMPUTER AND INFORMATION PROCESSING

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| Course Name (English) | COMPUTER AND INFORMATION PROCESSING APPROVED |
| Course Code | CSC134 |
| MQF Credit | 3 |
| Course Description | This course exposes the students on the essentials of computing and deals with the general computer literacy. Understanding the computer is becoming more essential to be productive and successful in today's world. The course exposes fundamental concepts in a manner that emphasizes their importance from the user's point of view. The computer is transforming the way we learn, communicate and do business. Besides providing an overview of computers – what they are doing and what they can do, this course also covers the aspects including computer security and ethics, modern trends and issues. The students are expected to have hands-on experience of using popular application packages. |
| Transferable Skills | - Use application to real situation for example using Ms Office package - Ms Word, Ms Excel & Ms Powerpoint. - Be able identify the computer components and technology |
| Teaching Methodologies | Lectures, Blended Learning, Lab Work |
| CLO | CLO1 Comprehend the concept, components and processing of computer, communication, security, and ethics in the industry. CLO2 Follow the use of current business software for various application in the industry. CLO3 Discover the current issues in computer, communication technologies and security in the industry. |
| Pre-Requisite Courses | No course recommendations |
| Topics | |
| 1. Introduction 1.1) Introduction to Computer 1.2) Component of a computer 1.3) Types of computers 1.4) Computer in society 1.5) Information systems 1.6) Your future, careers and opportunities | |
| 2. The system unit 2.1) Electronic Data and Instructions 2.2) System Board 2.3) Microprocessor 2.4) Memory 2.5) System Clock 2.6) Expansion Slot and Cards 2.7) Bus Lines 2.8) Ports and Cables 2.9) Power Supply | |
| 3. Input and output 3.1) Input Devices: keyboard, pointing devices, scanning devices, image capturing devices, audio-input devices 3.2) Biometrics authenticates devices 3.3) Output Devices: monitors, printers, audio-output devices 3.4) Combination of Input and Output Devices | |

4. Secondary storage

- 4.1) Floppy Disks
- 4.2) Hard Disks
- 4.3) Optical Disks
- 4.4) Other types of Secondary Storage

5. System software

- 5.1) Types of System Software: operating system (OS), utilities, device drivers, and language translators
- 5.2) Functions, features and categories of OS
- 5.3) Most popular OS Used Today
- 5.4) Types of Utilities

6. Application software

- 6.1) Types of Basic Application Software: word processor, spreadsheet, DBMS, graphic presentation and browser
- 6.2) Integrated Packages and Suite packages
- 6.3) Sharing data between application
- 6.4) Types of Specialized Application Software: Multimedia, Web Authoring, Graphic Programs, Artificial Intelligence and Virtual Reality

7. Internet and Web

- 7.1) Internet Services: communicating (e-mail, teleconferencing, discussion group); shopping (e-payment, e-commerce); entertainment (games, movie previews); researching
- 7.2) Internet Access: ISP and Online Services
- 7.3) Web Utilities

8. Communications and Networking

- 8.1) Communication systems: Sending and receiving devices, communication channels, connection devices and data transmission specifications.
- 8.2) Network terms
- 8.3) Types of network: LAN, MAN, WAN and WLAN
- 8.4) Network architecture: topology and strategy
- 8.5) Organizational Internet: Intranet, Extranet and Firewall

9. Privacy, security, Ethics and Ergonomic

- 9.1) Privacy: how to protect privacy and personal responsibility
- 9.2) Security: threats to computer security, computer criminal, computer crime, and measure of protections
- 9.3) Ethics issue
- 9.4) Ergonomics: physical health, mental health, green PC

10. Application Module (Computer Lab Session)

- 10.1) Introduction to different types of application software and hands-on experience on compulsory and one optional software of the following categories of application software:

- 10.2)
- 10.3) Introduction to Windows (Compulsory)
- 10.4) - Features and editions
- 10.5) - Basic : Interface, part of a window, dialog box
- 10.6) - Desktop : window Aero, taskbar, menu bar, flip 3D
- 10.7) - Window Explorer : File & folder, searching, libraries
- 10.8) - Customisation : Gadgets, themes
- 10.9) - Accessories : Calculator, paint, recorder, snipping tool, system tools
- 10.10) - Shortcut keys
- 10.11)
- 10.12) Word Processing Software (Compulsory)
- 10.13) - Create: open, new, and save
- 10.14) - Edit: select, copy, cut and paste
- 10.15) - Insert graphics
- 10.16) - Format: paragraph formatting, word wrap, auto content, format painter, page numbering, header and footer, bullets and numbered lists and text alignment
- 10.17) - Customizing: table and columns formatting
- 10.18) - Tools: spelling and grammar checker
- 10.19) - Preview and printing: properties, paging, page setup and margin
- 10.20)
- 10.21) Spreadsheet Software (Compulsory)
- 10.22) - Create: open, new, and save
- 10.23) - Edit: copy, cut and paste
- 10.24) - Format: format cell, text alignment, word wrap, merge and centre
- 10.25) - Customizing: column width, row height, auto format
- 10.26) - Formulas and functions: fill handle, sum, average, max, min, and arithmetic expression
- 10.27) - Chart: chart wizard, modifying, editing and formatting
- 10.28) - Analysis: sort and validation
- 10.29) - Printing: properties, paging, page setup and margin
- 10.30)
- 10.31) Presentation Graphic Software (Compulsory)
- 10.32) - Create: blank, auto content wizard, design templates
- 10.33) - Drawing: clip art, and insert files
- 10.34) - Insert object: media, video, music, movies and charts, Hyperlinks
- 10.35) - Slide effect: layouts, transition, custom animation and timing

- 10.36) - View: Master slide, slide sorter and slide outline
- 10.37) - Slide show tools: current slide, previous, next and go to slide
- 10.38) - Printing: option (handout, slide and notes), properties, paging, page setup and margin
- 10.39)
- 10.40) Database Management Software (Optional)
- 10.41) - Create database
- 10.42) - Data Entry: tables, fields, records and primary key
- 10.43) - Add, change, delete data in a database
- 10.44) - Create relationship
- 10.45) - Sort and retrieve data
- 10.46) - Create and modify a query, form and report: wizard
- 10.47) - Print report based request
- 10.48)
- 10.49) Publication Software – (Optional)
- 10.50) - Creating & Editing a Publication
- 10.51) - Working with fonts and styles
- 10.52) - Change design and layout
- 10.53) - Working with pictures and word art, table
- 10.54) - Creating various publications – Newsletter, Brochure, Postcard, Business Card etc
- 10.55)
- 10.56) Web Authoring Tools – (Optional)
- 10.57) - Create and design homepage
- 10.58) - Hyperlinks and Hypertexts
- 10.59) - Download files, copy images and transfer files
- 10.60) - Publishing web
- 10.61) - Upload web by using free servers
- 10.62)
- 10.63) Other relevant applications/tools – Web 2.0, SPSS, Math LAB etc

| Assessment Breakdown | % |
|-----------------------|--------|
| Continuous Assessment | 50.00% |
| Final Assessment | 50.00% |

| Details of Continuous Assessment | Assessment Type | Assessment Description | % of Total Mark | CLO |
|----------------------------------|-----------------|------------------------|-----------------|------|
| | Assignment | Assignment | 10% | CLO3 |
| | Group Project | Lab Project | 10% | CLO2 |
| | Lab Exercise | Lab Exercise | 10% | CLO2 |
| | Test | Test 1(Ch 1 - 5) | 10% | CLO1 |
| | Test | Test 2 (ch 6 - 9) | 10% | CLO1 |

| Reading List | Recommended Text | <ul style="list-style-type: none"> Gary Shelly, Misty Vermaat 2012, <i>Discovering Computers Fundamentals: Your Interactive Guide to the Digital World</i>, 8th Ed., Cengage Learning [ISBN: 1111530459] |
|--------------------|---|---|
| | Reference Book Resources | <ul style="list-style-type: none"> Deborah Morley, Charles Parker 2014, <i>Understanding Computers: Today and Tomorrow, Introductory</i>, 15th Ed., Cengage Learning [ISBN: 9781285767307] Timothy O'Leary, Linda O'Leary 2013, <i>Computing Essentials 2014 Complete Edition</i>, McGraw-Hill/Irwin [ISBN: 0073516864] Alan Evans, Kendall Martin, Mary Anne Poatsy 2015, <i>Technology in Action Complete</i>, 10 Ed., Prentice Hall [ISBN: 0133949567] Deborah Morley, Charles Parker 2014, <i>Understanding Computers: Today and Tomorrow, Comprehensive</i>, 15th Ed., Cengage Learning [ISBN: 1285767276] Lecturers of TMSK, UiTM Shah Alam., <i>IT Kini</i>, McGraw Hill. |
| Article/Paper List | This Course does not have any article/paper resources | |
| Other References | This Course does not have any other resources | |