

General Foundation Center

Course Syllabus

Course Specifications

Course Title	Computing Skills	
Course Code	GFPCS0001	
Pre-requisite	Entry Test	
Contact Hours	4	Level : 3

Course Description

This course focuses on the development of the student's understanding of Information Technology and the acquisition of essential skills in computing in preparation for their postsecondary or higher education studies in a variety of disciplines.

Course Objectives

At the end of the course, students should be able to:

- Describe the make-up of personal computer system in terms of hardware and software, data storage and memory.
- Describe how to use information networks within computing.
- Use computer based software applications in everyday life.
- Describe the basic principles of personal computer systems and file management.
- Demonstrate the skills needed to create good quality documents, spreadsheets and presentations.
- Describe the fundamentals of the computer networks, tools for searching and accessing information in the Internet and using electronic mails for communicating with other people.
- Identify risks and security issues concerning personal and organizational data.

Course Learning Outcomes

Upon completion of the course, students should be able to:

Module 1 - Computer Fundamentals

1. Describe the main functional blocks of a computer system and how they work in sequence to process information.
2. Describe the functions of different hardware components such as CPU, storage systems, types of memories like RAM, ROM etc. and common input and output devices.
3. Compare and contrast different types of computing and end-user devices.
4. Explain the essential terms related to computing such as Hertz and byte.
5. Describe the different types of software: operating systems, application software and programming software.
6. Install and uninstall software applications.

7. Explain the concept of software copyright.
8. Explain the terms shareware, freeware, end-user license agreement.
9. Describe computer ergonomics (seating, lighting, positioning, ventilation etc.).
10. Explain the common health problems associated with computer usage and ways to avoid them.
11. Be aware of new trends and developments in computing

Module 2 - Basic Computer Operation and File Management

1. Demonstrate basic keyboard skills.
2. Describe the different types of menus.
3. Describe the hierarchical structure of drives, files and folders.
4. Demonstrate searching, sorting and changing views for files and folders.
5. Describe the different file types.
6. Open, modify, save and close files and application programs.
7. Demonstrate how to compress and decompress files and folder.
8. Demonstrate the use of built-in help menu.
9. Demonstrate the usage of removable media for storing files.
10. Connect basic peripheral devices.
11. Demonstrate logging on and off a computer network.

Module 3 - Internet, WWW and Email

1. Describe the different types of networks.
2. Describe the history and jargon associated with the Internet.
3. Identify the purpose of a browser in accessing information on the World Wide Web (WWW) and navigate the Web.
4. Demonstrate the use of web browser tools such as: bookmarks, display and hide built-in toolbars, deleting browsing history and print web pages.
5. Use search engines.
6. Describe how electronic mail works including the components of electronic mail message, electronic mail address, and electronic mail options.
7. Use electronic mail.
8. Describe how social media works.
9. Use social media.
10. Explain the essential concepts of cloud storage.
11. Describe the effect of IT on our lives and on society generally.

Module 4 - Information Security

1. Identify the benefits and risks of network computing
2. Identify the security issues with electronic mails.
3. Identify risks to personal and organizational data.
4. Describe the protected web sites, use of digital certificates, encryption – decryption, uses of firewall and how to get protected from Hackers etc.
5. Explain different types of viruses (including worms, Trojans etc.) and clean viruses and worm-infected systems with appropriate software.
6. Explain Privacy issues, good passwords and access rights.
7. Describe the concept of backup and its importance to data recovery.
8. Explain the provisions under the Omani Data Protection Legislation.

Module 5 - Word Processing, Spreadsheets and Presentation

1. Recognize, open, modify, navigate, save and close a document, spreadsheet and presentation file.
2. Describe various page set-up options, page orientation, page sizes and setting up of margins.
3. Identify and use different design layouts and view modes.
4. Display/hide toolbars.
5. Describe different types of menus

6. Use search/replace to find/replace a specific word/phrase
7. Move/delete/resize picture/image/chart
8. Describe the use of borders and shading.
9. Demonstrate use of automatic spell/grammar checking & correction.
10. Describe some basic short cut keys.
11. Describe various options for previewing and printing documents.
12. Demonstrate formatting at the character, paragraph and document levels.
13. Insert text and/or characters and/or pictures/drawings from various sources.
14. Demonstrate use of the copy/cut/paste functions.
15. Use page elements such as Page Numbers, Header/Footer, Foot/End Notes, Shapes, Pictures, Symbols, and Special Characters etc.
16. Explain the terms associated with a table, e.g., column, row, cell, and demonstrate table creation, manipulation of cells, data insertion and formatting.
17. Demonstrate how to handle (Insert, rename, delete, duplicate, move etc.) worksheets.
18. Use built-in functions and create formulas in a worksheet to solve problems.
19. Demonstrate the formatting of data, cells, rows and columns in a worksheet.
20. Create and manipulate different types of charts/graphs on the worksheet data.
21. Explain the difference between master slide and other slides.
22. Explain Animation and Color scheme.
23. Demonstrate the ability to duplicate, move slides within the presentation and between open presentations.
24. Demonstrate the use of transition and animation effects.
25. Use special tools for enhancing presentations such as Video and Screen Recording.

General Study Skills Learning Outcomes¹

6.2.1 Managing time and accepting responsibility

- a) Work in pairs or groups and participate accordingly i.e. take turns, initiate a discussion, interrupt appropriately, express an opinion.
- b) Follow university policies on attendance and punctuality.
- c) Bring required materials (pens, pencils, folder, etc) to class.
- d) Work to imposed deadlines.
- e) Show respect for teachers and others and their rights to have a difference of opinion.
- f) Use a variety of study techniques.
- g) Create term planners and study schedules noting key dates/events.
- h) Complete homework on time.
- i) Continually revise one's work.
- j) Independently access and use computer labs and the internet for language learning.
- k) Identify preferred study strategies based on learning styles.
- l) Organize a feasible study schedule that accommodates other responsibilities.
- m) Describe learning experiences, challenges, insights in a daily journal.
- n) Organize and maintain a system of recording vocabulary (keep a vocabulary log).
- o) Organize and maintain a portfolio of one's work.

6.2.2 Research Skills

- a) List the key ideas to guide search for information.
- b) Use the library system for finding, borrowing and returning library material.
- c) Use an English-English dictionary for language learning.
- d) Use a contents page and an index to locate information in a book.

¹ These LOs are adapted from the OAS for GFP.

- e) Extract relevant information from a book or article using a battery of reading strategies (e.g. skimming, scanning, etc.).
- f) Find specific information using internet search engines and electronic resources.
- g) Cite a source in accordance with academic conventions.
- h) Classify and sort new information.
- i) Select or reject a source based on difficulty level, relevance and currency.
- j) Assess the reliability, objectivity and authenticity of a source.
- k) Summarize and paraphrase information in one's own words.

6.2.3 Taking Notes

- a) Recall and define main concepts.
- b) Utilize abbreviations and symbols.
- c) Use English rather than Arabic for notes in margins and glossing vocabulary.
- d) Extract and record key information (the gist) from a written or spoken source based on own interpretation of information.
- e) Adopt a note-taking strategy (e.g. Cornell system; mind mapping).
- f) Support key points with relevant additional details.
- g) Organize information to enable quick reference at a later date.
- h) Date one's notes.
- i) Use notes to create a summary.
- j) Reproduce key information and supporting details from notes in one's own words.
- k) Sort out information and reject irrelevant pieces.

6.2.4 Giving Presentations

- a) Outline and define main concepts.
- b) Address questions from the audience.
- c) Plan and conduct a presentation based on information from written material, interviews, surveys, etc.
- d) Speak in a clearly audible and well-paced voice.
- e) Follow a presentation format.
- f) Use presentation language (discourse markers etc.).
- g) Achieve the key aim of informing the audience.
- h) Make use of audio/visual aids when giving oral presentations.
- i) Tailor content and language to the level of the audience.
- j) Maintain some eye contact with audience.
- k) Speak from notes in front of an audience using index cards.
- l) Observe time restrictions in presentations.
- m) Organize and present information in a logical order at a comprehensible speed.
- n) Invite constructive feedback and self-evaluate the presentation.

Assessment:

- Continuous Assessment (50%)
- Final Exam (50%)

Assessment Marks Details	Labs	Group Activity	Self-Learning Activity + Presentation	Test-1	Test-2	Final Test	Total
Modules Covered	Module 1,2,3,5	Module 4	Module 4 & 5	Module 1,2,3	Module 5	All Modules	All Modules
Total	15 Marks	5 Marks	10 Marks	10 Marks	10 Marks	50	100 Marks

Learning Materials:

- Teaching materials handout.

UTAS Graduate Attributes