Oman Academic Standards (OAS)
Information Technology

<mark>5.2.1 Computer Fundamentals</mark>

    a) Describe the main functional blocks of a computer system and how they work in sequence to process information.
    b) Hardware.
    c) Software.
    d) Working with computers.

<mark>5.2.2 Basic Computer Operation and File Management</mark>

    a) Understand and demonstrate proper switching-on and shutting-off of the computer.
    b) Open, modify, save and close files and application programs.
    c) Successfully connect basic peripheral devices (e.g. a printer).
    d) Understand the hierarchical structure of drives, files and folders.
    e) Understand the meaning and types of file extensions.
    f) Understand the different types of menus.
    g) Save documents in any permitted location in different formats.
    h) Explain different types of viruses (including worms, Trojans etc.) and clean viruses and worm-infected systems with appropriate software.
    i) Explain Privacy issues, good passwords and access rights.
    j) Demonstrate formatting of floppy disks and removable media; usage of USB drives, writing files to CD-R/RW media and backing up of data.
    k) Demonstrate logging on and off a computer network.
    l) Demonstrate how to compress and decompress (zip/unzip) individual files and files in a folder.
    m) Demonstrate good password creation practice.
    n) Demonstrate searching for files and folders.
    o) Demonstrate the use of built-in help menu.

<mark>5.2.3 Word Processing</mark>

    a) Recognize, open, modify, navigate, save and close a word application file.
    b) Open and close a new or existing document and switch between multiple documents.
    c) Understand various page set-up options, page orientation, page sizes and setting up of margins.
    d) Understand the use of page layout, page borders and shading.
    e) Display/hide toolbars.
    f) Understand different types of menus in a word processing application.
    g) Explain the difference between text, paragraph, and document level formatting.
    h) Identify different text formats, e.g. bold, italic, font type, size and color; cases, subscript, superscript; different types of bullets/numbering etc.
    i) Understand changing the line spacing in a document and aligning text left, center and right justified.
    j) Insert automatic page numbers, header/footer, foot/end notes, auto shapes, pictures, symbols, special characters etc.
    k) Use search/replace to find/replace a specific word/phrase in a document.
    l) Move/delete/resize picture/image/chart in a document or between different documents.
    m) Understand the use of borders and shading in a document.
    n) Demonstrate use of automatic spell/grammar checking & correction.
    o) Understand some basic short cut keys.
    p) Understand various print options and how to print documents after preview.
    q) Demonstrate formatting at the character, paragraph and document levels.

r) Demonstrate the ability to convert written text into a formatted electronic document.

s) Insert text and/or characters and/or pictures/drawings from various sources.

t) Demonstrate use of the copy/cut/paste functions.

u) Explain the terms associated with a table, e.g.: column, row, cell, and demonstrate table creation, manipulation of cells, data insertion and formatting.

v) Use built-in help functions.

w) Understand and demonstrate the ability to print documents using various print options, using the default printer and a network printer.

5.2.4 Spreadsheets

a) Recognize, open, modify, navigate, save and close a spreadsheet application file.

b) Identify the main components of a spreadsheet window.

c) Explain the basic uses of spreadsheets.

d) Create, open, save, and close spreadsheets.

e) Use the help system effectively.

f) Identify and use the different menus and toolbars to set up the worksheets.

g) Demonstrate how to insert, store and manipulate data.

h) Demonstrate how to handle (insert, rename, delete, duplicate, move etc.) worksheets.

i) Generate various formulas using built-in functions and use them appropriately and correctly to solve problems.

j) Demonstrate the formatting of data, cells, rows and columns in a worksheet.

k) Create and manipulate different types of charts/graphs on the worksheet data.

l) Explain usage of formulas and functions in a worksheet.

m) Explain generating various charts and graphs.

n) Explain how to sort, link and consolidate spreadsheets.

o) Demonstrate the understanding of various print options and how to print spreadsheets and charts after appropriate page set-up and pre-view.

p) Demonstrate use of the edit (copy/cut/paste etc.) functions.

q) Demonstrates the ability to reproduce a hand written table as an electronic spreadsheet.

r) Demonstrates the ability to perform basic analysis of data using graphs and charts.

5.2.5 Presentation

a) Recognize, open, modify, navigate, save and close a presentation application file.

b) Identify and use different design layouts and presentation view modes.

c) Use help system effectively.

d) Demonstrate how to use display/hide toolbars.

e) Identify and use different types of menus in a presentation application.

f) Explain the difference between master slide and other slides.

g) Explain animation and color scheme.

h) Explain the main formatting features to improve the appearance of the slides.

i) Demonstrate the ability to use various print options to print the presentation slides.

j) Demonstrate the ability to insert pictures and objects to enhance the outlook of the presentation.

k) Demonstrate the use of adding notes, header and footer, updated dates and automatic numbering for the presentation.

l) Demonstrate the ability to duplicate, move slides within the presentation and between open presentations.

m) Demonstrate the use of transition and animation effects.

n) Demonstrate the use of proofing tools to correct the content of the presentation.

   a) Network and internet fundamentals.
   b) Browsing the internet.
   c) Electronic mail.
   d) Identify how computers are used in different areas of work, school and home.

Breakdown of OAS by Levels

OAS for IT	Number of OAS	Distribution of OAS across the levels		
		Pre-Level	Level 1	Level 2
5.2.1 Computer Fundamentals (a-d)	4	(part)	4(part)	(part)
5.2.2 Basic Computer Operation and File Management (a-o)	15	5	6(part)	4(part)
5.2.3 Word Processing (a-w)	23	7	16	-
5.2.4 Spreadsheets (a-r)	18	-	-	18
5.2.5 Presentation (a-n)	14	-	-	14
5.2.6 Internet, WWW and Email (a-d)	4	-	1	3
Total	78	12	27	39
GENERAL STUDY SKILLS				
OAS-GSS-6.2.1 Managing time and accepting responsibility		✓	✓	✓
OAS-GSS-6.2.2 Research Skills		✗	✗	✗
OAS-GSS-6.2.3 Taking Notes		✓	✓	✓
OAS-GSS-6.2.4 Giving Presentations		✗	✗	✗

FP Levels	S. No.	DU FP LO Scope & Sequence (IT & General Study Skills) (Pre-Level)	
		OAS LO	FP LO
Pre-Level	1	5.2.1 Computer fundamentals: (Part) Students are required to understand the make-up of personal computer system. (d-Part: Working with computers)	1. Working with computers: Demonstrate basic keyboard skills, demonstrate a basic understanding of computer ergonomics (seating, lighting, positioning, ventilation etc.), explain the common health problems associated with computer usage and ways to avoid them.
	2	5.2.2 Basic computer operation and file management: Students are required to understand and be familiar with the basic principles of operation of a personal computer system and with basic principles of file management using a computer. (a, b, f, g, n)	1. Understand and demonstrate proper switching-on and shutting-off of the computer.
			2. Open, modify, save and close files and application programs.
			3. Understand the different types of menus.

			4. Save documents in any permitted location in different formats.
			5. Demonstrate searching for files and folders.
	3	5.3.3 Word processing: (Part) The general objective of this component is to equip students with the essential skills that they need to create good quality documentation during their studies. (a, b, f, h, o, q, t)	1. Recognize, open, modify, navigate, save and close a word application file.
			2. Open and close a new or existing document and switch between multiple documents.
			3. Understand different types of menus in a word processing application.
			4. Identify different text formats, e.g. bold, italic, font type, size, color, cases, subscript, superscript; different types of bullets/numbering etc.
			5. Understand some basic short cut keys.
			6. Demonstrate formatting at the character, paragraph and document levels.
			7. Demonstrate use of the copy/cut/paste functions.

General Study Skills (Pre Level)

OAS-GSS-6.2.1 Managing time and accepting responsibility

f) Use a variety of study techniques. h) Complete homework on time.

OAS-GSS-6.2.3 Taking Notes

a) Recall and define main concepts. b) Utilize abbreviations and symbols. e) Adopt a note-taking strategy (e.g. Cornell system; mind mapping).

OAS-GSS-6.2.2 Research Skills: Achieved in English Course

OAS-GSS-6.2.4 Giving Presentations: Achieved in English Course

FP Levels	S. No.	DU FP LO Scope & Sequence (IT & General Study Skills) (Level 1)	
		OAS LO	FP LO
Level 1	1	5.2.1 Computer fundamentals: (Part) Students are required to understand the make-up of personal computer system in terms of hardware, software, data storage and memory. (a, b, c, d-Part)	1. Describe the main functional blocks of a computer system and how they work in sequence to process information.
			2. Hardware: Identify and describe the function of different hardware components such as CPU, storage system, types of memories like RAM, ROM etc. and common input and output devices, compare and contrast different types of computers, including network computers, personal computers, laptops and PDAs, explain the terms (incl. MHz, GHz) and byte (incl. KB, MB, GB, TB).
			3. Software: Identify and explain the difference types of software: operating system, application software and programming software.

			4. Working with computers: Identify how computers are used in different areas of work, school and home. Identify the requirements for a computer suitable for purchasing for student usage and explain the terms shareware, freeware.
	2	5.2.2 Basic computer operation and file management: (Part) Students are required to understand and be familiar with the basic principles of operation of a personal computer system and with basic principles of file management using a computer. (c, d, e, i, j-part, l)	1. Successfully connect basic peripheral devices (e.g. a printer).
			2. Understand the hierarchical structure of drives, files and folders.
			3. Understand the meaning and types of file extensions.
			4. Explain Privacy issues, good passwords and access rights.
			5. Demonstrate formatting of floppy disks and removable media; usage of USB drives, writing files to CD-R/RW media.
			6. Demonstrate how to compress and decompress (zip/unzip) individual files and files in a folder.
	3	5.3.3 Word processing: (Part) The general objective of this component is to equip students with the essential skills that they need to create good quality documentation during their studies. (c, d, e, g, i, j, k, l, m, n, p, r, s, u, v, w)	1. Understand various page set-up options, page orientation, page sizes and setting up of margins.
			2. Understand the use of page layout, page borders and shading.
			3. Display/hide toolbars.
			4. Explain the difference between text, paragraph, and document level formatting.
			5. Understand changing the line spacing in a document and aligning text left, center and right justified.
			6. Insert automatic page numbers, header/footer, foot/end notes, auto shapes, pictures, symbols, special characters etc.
			7. Use search/replace to find/replace a specific word/phrase in a document.
			8. Move/delete/resize picture/image/chart in a document or between different documents.
			9. Understand the use of borders and shading in a document.
			10. Demonstrate use of automatic spell/grammar checking & correction.
			11. Understand various print options and how to print documents after preview.
			12. Demonstrate the ability to convert written text into a formatted electronic document.

			13. Insert text and/or characters and/or pictures/drawings from various sources.
			14. Explain the terms associated with a table, e.g.: column, row, cell, and demonstrate table creation, manipulation of cells, data insertion and formatting.
			15. Use built-in help functions.
			16. Understand and demonstrate the ability to print documents using various print options, using the default printer and a network printer.
	4	5.2.6 Internet, www and email: The general objective of this component is to introduce students to the fundamentals of computer networks. (d)	1. Identify how computers are used in different areas of work, school and home.

General Study Skills (Level 1)

OAS-GSS-6.2.1 Managing time and accepting responsibility

g) Create term planners and study schedules noting key dates/events.
i) Continually revise one's work.
o) Organise and maintain a portfolio of one's work.

OAS-GSS-6.2.3 Taking Notes

a) Recall and define main concepts.
b) Utilize abbreviations and symbols.
e) Adopt a note-taking strategy (e.g. Cornell system; mind mapping).

OAS-GSS-6.2.2 Research Skills: Achieved in English Course

OAS-GSS-6.2.4 Giving Presentations: Achieved in English Course

FP Levels	S. No.	DU FP LO Scope & Sequence (IT & General Study Skills) (Level 2)	
		OAS LO	FP LO
Level 2	1	5.2.1 Computer fundamentals: (Part) Students are required to understand how information networks are used within computing and be aware of the uses of computer-based software applications in everyday life. (d-Part: Working with computers)	1. Working with computers: Explain the concept of software copyright, explain the terms end-user license agreement and explain the Omani data protection legislation.
	2	5.2.2 Basic computer operation and file management: (Part) Students are required to understand and be familiar with the basic principles of operation of a personal computer system. (h, j-part, k, m, o)	1. Explain different types of viruses (including worms, Trojans etc.) and clean viruses and worm-infected systems with appropriate software.
			2. Demonstrate backing up of data.
			3. Demonstrate logging on and off a computer network.
			4. Demonstrate good password creation practice.
			5. Demonstrate the use of built-in help menu.
	3	5.2.4 Spreadsheets: The general objectives of this component are to equip students with the essential skills that they need to create good quality spreadsheets during their studies, and the understanding of spreadsheet packages so that they can utilize it for data processing tasks during their studies and in future. (a-r)	1. Recognize, open, modify, navigate, save and close a spreadsheet application file.
			2. Identify the main components of a spreadsheet window.
			3. Explain the basic uses of spreadsheets.
			4. Create, open, save, and close spreadsheets.

			5. Use the help system effectively.
			6. Identify and use the different menus and toolbars to set up the worksheets.
			7. Demonstrate how to insert, store and manipulate data.
			8. Demonstrate how to handle (Insert, rename, delete, duplicate, move etc.) worksheets.
			9. Generate various formulas using built-in functions and use them appropriately and correctly to solve problems.
			10. Demonstrate the formatting of data, cells, rows and columns in a worksheet.
			11. Create and manipulate different types of charts/graphs on the worksheet data.
			12. Explain usage of formulas and functions in a worksheet.
			13. Explain generating various charts and graphs.
			14. Explain how to sort, link and consolidate spreadsheets.
			15. Demonstrate the understanding of various print options and how to print spreadsheets and charts after appropriate page set-up and pre-view.
			16. Demonstrate use of the edit (copy/cut/paste etc.) functions.
			17. Demonstrates the ability to reproduce a hand written table as an electronic spreadsheet.
			18. Demonstrates the ability to perform basic analysis of data using graphs and charts.
	4	5.2.5 Presentation: The general objectives of this component are to equip students with the essential skills that they need to create professional presentations during their studies and an understanding of presentation packages so that they can utilize them for presenting information in an effective manner during their studies and in the future. (a-n)	1. Recognize, open, modify, navigate, save and close a presentation application file.
			2. Identify and use different design layouts and presentation view modes.
			3. Use help system effectively.
			4. Demonstrate how to use display/hide toolbars.
			5. Identify and use different types of menus in a presentation application.
			6. Explain the difference between master slide and other slides.
			7. Explain animation and colour scheme.
			8. Explain the main formatting features to improve the appearance of the slides.
			9. Demonstrate the ability to use various print options to print the presentation slides.

			10. Demonstrate the ability to insert pictures and objects to enhance the outlook of the presentation.
			11. Demonstrate the use of adding notes, header and footer, updated dates and automatic numbering for the presentation.
			12. Demonstrate the ability to duplicate, move slides within the presentation and between open presentations.
			13. Demonstrate the use of transition and animation effects.
			14. Demonstrate the use of proofing tools to correct the content of the presentation.
	5	5.2.6 Internet, www and email: The general objective of this component is to introduce students to the fundamentals of computer networks and communication systems which assist in providing the students with the tools for searching and accessing information remotely and using electronic mails for communicating with other people. (a, b, c)	1. Network and internet fundamentals: Identify network fundamentals, types and the benefits and risk of network computing, understand the history and jargon associated with the internet.
			2. Browsing the internet: Identify the purpose of a browser in accessing information on the world wide web and navigate the web, understand how to deal with web browser tools such as: Book mark, display and hide built-in toolbars, deleting browsing history and print web pages, be able to search the internet for information using search engine such as: Google, Yahoo, Ask Me, etc.
			3. Electronic mail: Understand how electronic mail works including the components of electronic mail message, electronic mail address, and electronic mail options, create an e-mail account, read and send electronic mail messages, reply and forward electronic mail message, use of cc – bcc, and manage attachments, identify the security issues with electronic mails, identify risks to personal and organizational data, understand the protected web sites, use of digital certificates, encryption – decryption, uses of firewall and how to get protected from hackers etc., describe the effect of IT on our lives and on society generally.

General Study Skills (Level 2)

OAS-GSS-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.
c) Bring required materials (pens, pencils, folder, etc.) to class.
d) Work to imposed deadlines.
h) Complete homework on time.

OAS-GSS-6.2.3 Taking Notes

a) Recall and define main concepts.
e) Adopt a note-taking strategy (e.g. Cornell system; mind mapping).
i) Use notes to create a summary.

OAS-GSS-6.2.2 Research Skills: **Achieved in English Course**
OAS-GSS-6.2.4 Giving Presentations: **Achieved in English Course**