

ICT – Core Competence Programme

Form 4

Teacher's Handbook

Unit 1 – Animating a Story

Digital Tools

- MS PowerPoint** Shapes can be inserted to compose a picture. Animations can simulate moving objects. Text can be added to shapes. Coloured rectangles and sectors can be used to represent data, such as pie charts, bar charts and column graphs.
- Internet Browser** Typically used to search for images online.
- File Management** This is done through the file management utility of the operating system.
- Snipping Tool** Simple tool to grab parts of the screen. A simple tool worth being aware of.

Course Layout

The course is spread over 6 lessons (of 40 minutes each) during which students are expected to develop a PowerPoint presentation with animated objects. Students are continuously assessed during these six lessons (refer to [Continuous Assessment Mark Sheet](#) in Appendix 1).

An additional 2 Round Up lessons are used to collate the work of the students.

Method of assessment	Number of Lessons	Components	Points
Continuous	6	Slide Show presentation skills	45
		File management skills	5
		Collaborative skills	10
		<i>Sub-total</i>	<i>60</i>
Summative	15 min (Annual Exam)	Slide Show presentation skills	35
		File management skills	5
		<i>Sub-total</i>	<i>40</i>
		Total	100

General Scheme

The main aim of this unit is to allow students explore a method of composing and animating pictures. The following skills are involved throughout this unit:

1. **File management:** locate a file on backing storage device, open a file, save a file, delete a file.
2. **Internet browsing:** open a browser, search for an image, copy image, save image to a location in a backing storage.
3. **Slide Show Presentation:** Insert a shape, change its size, colour. Flip, rotate, align shapes. Group shapes. Animate objects. Insert a graphical representation of data such as pie chart, bar graph and column graph. Change chart title, background colour, edit data.

Unit 1. Animating a Story (6 Lessons + 2 Round Up lessons)**Main Task: Compose and animate a picture****Task rules:**

- A student is expected to be able to compose pictures from shapes and animate them as slides.
- The final product should include the following features:
 - at least 10 slides, not more than 20.
 - Title slide showing the title of the story and the names/s of the student/s
 - The rest of the slides should include pictures / photos / shapes with animations
 - The text should be kept to a few words or a sentence per slide.
 - Callouts / Arrows can be used to label shapes / pictures.
 - Animations can be applied to basic shapes or composite shapes, to run simultaneously or in a staggered way.
 - Slide transitions to some slides.
 - Other effects like background music, voice over, video clips are allowed. These may be considered as special effect features.

Skill		Remarks
Insert shapes	Students will be able to size, move, and manipulate graphical objects.	<i>Shapes</i> are versatile ready-made graphics. One can manipulate to compose a picture out of basic shapes.
Change Fill colour of a shape	Students will be able to change the fill colour of the shape.	Fill with colour or texture.
Add Text inside shapes	Students will add short phrases inside shapes.	Text can be inserted inside shapes like rectangle or arrows to form signs.
Resolve Overlapping	Send to Back / Bring to Front	More than one shape can be inserted in the same slide. Together with sizing, it can create a feeling of objects more distant than others. Placing a picture behind another may help in creating depth. Combining with the Copy and Paste functions, one can create a collage easily.
Align	Students will be able to align shapes to other objects.	Shapes can be selected and aligned relative to the slide and also relative to the other selected objects.
Distribute	Students will be able to distribute selected objects both horizontally and vertically.	The shapes can be equally distributed either horizontally or vertically. This feature can be used to compose an object made up of multiple objects, for example a fence made of wooden planks.
Group/Ungroup	Once composed, the students will be able to group all the objects to make one complex object.	Several shapes can be grouped together. Similarly they can be ungrouped.
Rotate and Flip	Students will be able to rotate and flip a shape.	Rotate by 90°, flip vertically or horizontally.
Crop Pictures	Students will be able crop a picture.	Cropping can be used to trim a picture, for example trimming a screen shot.

Skill		Remarks
Graphical representation of data	Students will be able to edit graphs, and create their own representation of data.	<p>Pie charts, column charts and bar charts: tools to represent one set of discrete data.</p> <p>Change background colour of the chart. Edit title, edit data, change chart type.</p> <p>As an advanced feature – students may create their own charts perhaps after conducting a survey.</p>
Apply animations	Students will be able to apply animations to objects/shapes.	<p>A sequence of <i>animations</i> will help the audience follow the sequence of the story.</p> <p>Animations can be applied to be triggered together or in a sequence.</p> <p>One can simulate, for example, what happens when a moving snooker ball collides with a stationary one.</p>
Apply Slide Transitions	Students will be able to apply a slide transition.	<i>Transitions</i> help in creating pleasing visual effects that make a slide appear less static.

Appendix 1 - Continuous Assessment Mark Sheet

The created PowerPoint file is collected by the teacher at the end of every lesson (preferably on a Pen-Drive assigned to every student).

Marks are to be assigned at the teacher's discretion at the end of each lesson (L1 to L6). No marks are given for tasks not attempted or in the case of no progress on a partially completed task.

Partial marks are given for partially completed tasks. More points are gained once progress on a given task is noticed. Points accumulate and are registered in the "Points" column.

Slide Presentation Skills (45 marks)

	Description of task/skill	Lesson when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1.	Insert at least 5 shapes							5
2.	Fill a shape with colour or texture							5
3.	Insert text in a shape							5
4.	Resolve overlapping							2
5.	Align shapes							2
6.	Distribute shapes evenly							2
7.	Group/ungroup shapes							2
8.	Rotate/Flip shapes							2
9.	Crop a picture							2
10.	Apply animations to individual shapes							5
11.	Apply a sequence of animations							5
12.	Represent data using a pie chart or a bar graph or a column graph							5
13.	Edit data, edit chart title							3
	Total							45

File management skills (5 Points)

	Description of task/skill	Lesson when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1	Save PowerPoint file. Its filename to include Name and Surname of student using the file type pptx.							3
2	Locate and Open the PowerPoint file from a backing storage device.							2
	Total							5

Collaborative skills (10 Points)

	Description of task/skill	Lesson when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1	Student did manage to collaborate within the group.							5
2	Student did follow the instructions and advice throughout the exercise.							5
	Total							10

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Unit 2 – Word Processing

Digital Tools

Microsoft Word	<p>Word Processors are the most commonly used software in computers. Microsoft Word is an example of a word processor program. A word processor is a program used for storing, manipulating, and formatting text entered from a keyboard and providing a printout. You can use a word processor to prepare letters, essays, project reports etc. All word processor have spell checking, thesaurus and grammar checking facilities.</p> <p>Microsoft Word comes in a variety of versions. Over the years the program has been updated, making it more powerful and easier to use.</p>
File Management	This is done through the file management utility of the operating system.

Course Layout

The course is spread over 6 lessons (of 40 minutes each) during which students are expected to edit and format a number of documents using a word processor. Students are continuously assessed during these six lessons (refer to [Continuous Assessment Mark Sheet](#) in Appendix 2). An additional 2 Round Up lessons are used to collate the work of the students.

Method of assessment	Number of Lessons	Components	Points
Formative	6	Word Processing skills	45
		File management skills	5
		Collaborative skills	10
		<i>Sub-total</i>	<i>60</i>
Summative	2	Word Processing skills	35
		File Management skills	5
		<i>Sub-total</i>	<i>40</i>
		<i>Total</i>	100

General Scheme

The main aim of this unit is to allow students to create, edit, format and print documents using the features of a word processing application. The following skills are involved throughout this unit:

1. **File Management:** locate a file on backing storage device, open a file, save a file, delete a file.
2. **Word Processor:** Create new document, save/open document, format document (*font types, font size, bold, italics underline, text colour, text alignments, bullets and numbering etc.*), paragraph formatting (*indentation, line spacing and paragraph spacing*), insert a table into the document (*add/delete rows and columns, borders and shading*), inserting objects (*pictures, clipart, symbols, WordArt and shapes*), inserting other features (header and footer, page numbers, page-break), check the spelling and grammar of text in a document and print documents.

Skill		Remarks
New document	Create a new blank document.	It is recommended that students use the standard (or default) template called normal.dotx
Open document	Opening existing document.	Students should be able to locate the location/path of the document to be opened (desktop, drives or network).
Save document	Save a document to a location on a drive. Save a document under another name to a location on a drive.	Students should be able to save in a location/path where the document is going to be saved. Students should be able to distinguish between <i>Save</i> and <i>Save as</i> . Students should be encouraged to save their work regularly. Also a suitable filename must be used.
Zoom	Use magnification/zoom tools.	
Entering, deleting and editing text	Entering text in document. Edit text by entering, removing characters/words within existing text by over-typing to replace existing text.	Students should be aware of the insertion point /cursor. When the text reaches the right margin, a new line is automatically created. Students should also be aware of the difference between using backspace key and delete.
Copy, move text	Copy, move text within a document using the cut, copy paste buttons.	Different methods/techniques of how to use the cut, copy and paste features should be explained. (Buttons in ribbon, right-clicking or using short-cuts).
Use the undo command.	Use the undo command to reverse the last action you performed.	
Font types and size	Change text formatting by using different font types and font sizes.	
Bold, Italics and Underline	Apply text formatting using bold, italics and underline.	
Font Colour	Apply different text colours to text.	
Text Alignment	Align text to the left, right, center and justify.	

Paragraph Indentation	Indent paragraphs to the left or to the right	Students should learn to apply indentation both from the buttons in the ribbon and from the paragraph dialog box.
Line Spacing	Apply single, 1.5 lines, double line spacing within paragraphs.	Students should learn to apply line spacing both from the button in the ribbon and from the paragraph dialog box.
Paragraph Spacing	Apply spacing above, below paragraphs.	Students should learn to apply paragraph spacing both from the buttons in the ribbon and from the paragraph dialog box.
Add/remove Bullets and Numbering	Format information in lists using bullets or numbering.	Students should learn to use different bullets and number styles in a single level list.
Create/edit table	Create a new table. Insert, edit data in a table. Insert/delete rows and columns. Modify cell border line style, width and colour. Add shading/background colour to cells.	Modifying column width, row height should be explained to the students if required, but will not be examinable.
Insert Symbols or special characters.	Insert symbols and special characters (e.g. © & ®) which are not available on the keyboard.	Students should learn how to insert Maltese language characters (ħ, ż, ġ, ċ). Also the € sign is important.
Insert/Remove Object	Insert an object (picture, clipart, wordart and shapes) to a specified location in a document. Delete object.	It is highly recommended that students learn how to use the wrap-text feature.
Resize and Crop	Resize images proportionally and crop.	Students should use both the resizing handles and entering the preferred height or width.
Page break	Insert page break in document.	It is highly suggested to show students how to remove a page break; however this will not be examinable. Show/Hide button may be useful.

Header and Footer	Add/edit the header and footer of the document.	
Page Numbers	Apply automatic page numbering into the document.	
Spelling and Grammar	Spell check a document and make changes like: correcting spelling errors, deleting repeated words.	
Printing	Print a document from an installed printer using output options like: entire document, specific pages, number of copies.	A soft copy of the document can be produced by saving it to a PDF file.

Appendix 2 - Continuous Assessment Mark Sheet

Word Processing skills (45 points)

The document is collected by the teacher at the end of every lesson (preferably on a Pen-Drive assigned to every student).

Marks are to be assigned at the teacher's discretion at the end of each lesson (L1 to L6). No marks are given for tasks not attempted or in the case of no progress on a partially completed task.

Partial marks are given for partially completed tasks. More points are gained once progress on a given task is noticed. Points accumulate and are registered in the "Points" column.

	Description of task/skill	Lesson when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1.	Zoom							1
2.	Enter/Delete/Edit Text							1
3.	Copy/Move Text							2
4.	Font Type							2
5.	Font Size							2
6.	Bold, Italics and Underline							2
7.	Font Colour							2
8.	Text Alignment							2
9.	Paragraph Indentation							2
10.	Line Spacing							2
11.	Bullets/Numbering							2
12.	Insert Table							3
13.	Add Rows/Columns							3
14.	Modify border style, width or colour							2
15.	Add shading/background colour							2
16.	Insert Symbol							2
17.	Insert Object							2
18.	Insert Page Break							2
19.	Insert Header and Footer							2
20.	Insert Page Numbers							2
21.	Spell Checking							3
22.	Print Document							2
	Total							45

File management skills (5 Points)

	Description of task/skill	Lesson when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1.	Save the Document							3
2.	Open the Document.							2
	Total							5

Collaborative skills (10 Points)

	Description of task/skill	Lesson when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1.	Student did manage to collaborate within the group.							5
2.	Student did follow the instructions and advice throughout the exercise.							5
	Total							10

ICT – Core Competence Programme Syllabus for Form 4

Teacher's Handbook

Unit 3 – Creating Publications

Digital Tools

MS Publisher	This is a publishing software that offers an easy and quick way to creating professional looking publications such as brochures, calendars, banners and business cards. It will help the students to acquire the necessary skills to produce such publications.
File Management	This is done through the file management utility of the operating system.
MS Paint (or any other drawing tool)	This software will be used to create a simple logo/design which will later on be used in the publications produced. It will help students to discover/learn simple techniques and tools to create and manipulate images.

Course Layout

The course is spread over 6 lessons (of 40 minutes each) during which students are expected to develop a number of publications namely a Brochure, a Calendar, a Banner and a Business Card. Students are continuously assessed during these six lessons (refer to [Continuous Assessment Mark Sheet](#) in Appendix 3).

An additional 2 Round Up lessons are used to collate the work of the students.

Method of assessment	Number of Lessons	Components	Points
Formative	6	Publishing skills	45
		File management skills	5
		Collaborative skills	10
		<i>Sub-total</i>	<i>60</i>
Summative	2	Publishing skills	35
		File management skills	5
		<i>Sub-total</i>	<i>40</i>
		Total	100

General Scheme

The main aim of this unit is to allow the students to develop skills required to publish material. The following skills are involved throughout this unit:

1. **File management:** Locate a file on backing storage device, open a file, save a file, delete a file.
2. **MS Paint.** Open the software, create a logo by using shapes, colours and shapes.
3. **MS Publisher.** Open Publisher, save/open a publication, use existing templates, create publications, insert an image, add/copy/paste text, export publication for printing.

Creating Publications (6 Lessons + 2 Round Up Lessons)**Main Task: Creating Publications.**

We shall create a logo and save it in a format which can then be inserted in the student's publications:

- Logo can be designed from scratch.
- Logo can be provided by the teacher and edited by the students.

Publications to be created:

- A brochure
- A banner
- A business card
- A calendar

Task rules:

- A student is expected to present a brochure, a banner, a business card and a calendar.
- The final product should include the following features:
 - A simple logo produced/edited by the students
 - An additional image inserted in at least one of the publication
 - Text such as name, telephone number (in business card)
 - Different colour schemes

Set of skills required

Skill		Remarks
Create/Edit image (logo)	Start Paint and open a ready available image. Add Text and some further shapes.	Initial ideas of Logos should be provided by the teacher. These may include shapes, text and an imported image.
Save picture	The picture should be saved in an appropriate format.	To consider different formats such as jpg, png, gif, bmp.
Add text	Add text over the logo/image such as the name of the company or club.	Text could be added to an image. This could be the name or initials of a company, club. The logo will then be used in the publications produced through MS Publisher.
Insert image	Students will be able to insert the created image in Publisher.	When using templates, there will be placeholders for the images. The student could also use the Insert Picture feature to insert more pictures.
Use Templates	MS Publisher has many templates for different publications.	The students could use different templates to create their own publications.
Text Boxes	Add, delete, edit and move.	In MS Publisher, text is inserted in text boxes. These can be deleted, edited, moved.
Enhance publications	Styles, colour schemes, effects.	Students should be encouraged to enhance their publications by using image formatting techniques such as Shadow and Picture Styles. Even text formatting should be encouraged.
Printing	Prepare publications for printing.	Different publications can have differing settings when it comes to printing. The teacher should highlight such differences. A soft copy of the publications can be produced by saving it to a PDF file.

Appendix 3 - Formative Assessment marking sheet

Paint & MS Publisher skills (45 points)

	Skills	Lessons when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1	Create Logo containing Text, Shapes and image							4
2	Logo saved in an appropriate format							2
3	Create a Banner							3
4	Enhance the banner by changing the background colour							2
5	Create a Business card							3
	Input relevant data							2
	Add logo							2
	Print in top fold or side fold							2
6	Create a Calendar							3
	Prepare a Yearly calendar							2
	Add the required data							2
	Change colour scheme							2
7	Create a Brochure							3
	Paste text							2
	Add logo							2
	Insert an additional image							2
	Use Picture Style							2
	Change text formatting							2
8	Printing. The ability to print different publications in the most appropriate format. This could be done through pdf							3
	Total							45

File management skills (5 Points)

	Skills	Lessons when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1	Save publication.							3
2	Locate and load a publication from a storage device.							2
	Total							5

Collaborative skills (10 Points)

	Skills	Lessons when the task was completed						Points
		L1	L2	L3	L4	L5	L6	
1	Student did manage to collaborate within a group							5
2	Student did follow the instructions and advice.							5
	Total							10