



Republic of Rwanda
Ministry of Education



RTB | RWANDA
TVET BOARD

2D CHARACTER DESIGN

MMPCD401

DESIGN 2D CHARACTER

Competence

RQF Level: 4

Learning Hours

Credits: 10



Sector: ICT AND MULTIMEDIA

Trade: MULTIMEDIA PRODUCTION

Module Type: SPECIFIC

Curriculum: TVET Level 4 in Multimedia Production

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Purpose statement	At the end of this module, students will gain a deep understanding of character design principles, anatomy, proportion, color theory, and various design techniques. By exploring different art styles and mediums, students will learn to conceptualize, sketch, refine, and digitally render unique characters that effectively communicate personality, emotion, and narrative. With an emphasis on creativity and storytelling, this course aims to empower students to become skilled character designers capable of bringing their imagination to life and captivating audiences across various media platforms.					
Learning assumed to be in place	Technical Drawing, Advanced drawing, Storyboarding, Script Development					
Delivery modality	Training delivery		100%	Assessment		Total 100%
	Theoretical content		30%	Formative assessment	30%	50%
	Practical work:		70%		70%	
	• Group work and presentation	30%				
	• Individual work	40%				
			Summative Assessment		50%	

























Elements of Competency and Performance Criteria

Course content

1. Create a mood board	1.1. Script has been properly interpreted based on the visual requirements
	1.2. General mood has been accurately noted down according to the script

	1.3.	Reference materials have been effectively consulted according to the visual requirements
	1.4.	Mood board has been efficiently produced in accordance with the visual requirements
2. Make a character profile	2.1.	Mood board have been adequately interpreted based on character description
	2.2.	Personality traits and physical attributes have been suitably identified according to character description
	2.3.	Background information have been properly identified according to character description.
	2.4.	Character profile have been effectively produced according to the character description
3. Create concept art	3.1.	Mood board of a character profile has been absolutely interpreted based on character visual requirements
	3.2.	Thumbnails have been suitably created according to the character visual requirements
	3.3.	Physical attributes and assets of a character have been correctly developed according to the character visual requirements
	3.4.	Character expressions have been properly developed according to the character visual requirements
	3.5.	Character is accurately produced based on principles of art and design
4. Render character	4.1.	Software environment has been properly set in accordance with production requirements
	4.2.	Character have been neatly traced in software according to the production requirements
	4.3.	Character have been suitably finalized in accordance with production requirements
	4.4.	Files are successfully exported based on the next line of production

Learning outcomes	<p>At the end of the module the learner will be able to:</p> <ol style="list-style-type: none"> 1. Create a mood board. 2. Make a character profile. 3. Create concept art. 4. Render character.
Learning outcome 1: Create a mood board	Learning hours: 25
Indicative content	
<ul style="list-style-type: none"> ● Introduction to 2D character design <ul style="list-style-type: none"> ✓ Application of 2D character design <ul style="list-style-type: none"> 🎨 Animation 🎨 Game development 🎨 AR/VR Technology ✓ Types of character style <ul style="list-style-type: none"> 🎨 Hero 🎨 Mentor 🎨 Villain 🎨 Sidekick 🎨 Innocent ● Description of script <ul style="list-style-type: none"> ✓ Script elements ✓ The component of story <ul style="list-style-type: none"> 🎨 Characters 🎨 Setting 🎨 Plot 🎨 Conflict 🎨 Theme 🎨 Tone and Mood ✓ Script interpretation techniques <ul style="list-style-type: none"> 🎨 Character analysis 🎨 Character descriptions 	

-  Visualizing personality
-  Character backstories
-  Storyboarding
- ✓ Script breakdown
 -  Read and Familiarize
 -  Scene breakdown
 -  Location breakdown
 -  Character Breakdown
 -  Props and set dressing breakdown.
 -  Costumes breakdown
 -  Makeup and hair breakdown
 -  Special effects breakdown
- **Noting down general mood of story**
 - ✓ Role of mood in story
 - ✓ Difference types of moods
- **Introducing mood boards**
 - ✓ Mood board description
 - ✓ Mood board types
 -  Physical mood board
 -  Digital mood board.
 - ✓ Element of mood board
 -  Images
 -  Colors
 -  Textures
 -  Typography and other visual elements.
 - ✓ Digital mood board tools
 -  Graphic design software
 -  Online mood board platforms
 -  Mood board apps
 - ✓ Physical mood board tools
 -  Corkboard or bulletin board
 -  Foam board or poster board
 -  Scissors, Glue, and Tape
 -  Markers, Pens, and Labels

- **Identification of general mood**

- ✓ Mood and Atmosphere
 - ✚ Joy
 - ✚ Mystery
 - ✚ Darkness
 - ✚ Excitement
- ✓ Primary emotions
 - ✚ Happiness
 - ✚ Sadness
 - ✚ Anger
 - ✚ Fear
- ✓ Emotion variations
 - ✚ Character's mood changes
- ✓ Identification of purpose of the character
 - ✚ Protagonist
 - ✚ Antagonist
 - ✚ Supporting character
- ✓ Identification of character's essence
 - ✚ Motivations
 - ✚ Fears
 - ✚ Strengths
 - ✚ Weaknesses

- **Collection of reference materials**

- ✓ Concept art and illustrations
 - ✚ Art books
 - ✚ Online resources
- ✓ Fashion and costume references
- ✓ Character and portrait photography
- ✓ Art and design references
 - ✚ Paintings
 - ✚ Sculptures
 - ✚ Graphic design
 - ✚ Digital art

- ✓ Cultural and historical references
- ✓ Color palettes and swatches

- **Producing mood board**

- ✓ Organize and arrange mood board visual element.
 - ✚ Compositions
 - ✚ Placements
 - ✚ Sizes
 - ✚ Typography
 - ✚ Texture swatches
 - ✚ Sketches
 - ✚ Written words or quotes
- ✓ Review and refine.
 - ✚ Apply visual Style and Colors
 - ✚ Apply artistic techniques.
- ✓ Digitize (optional)
- ✓ Display and share

Resources required for the learning outcome

Equipment	Computer, Graphic tablets, Sketch pad
Materials	Notepad, Pen, Internet, Paper, Pencil, Eraser, Pen tablet
Tools	Editing software (Adobe Illustrator, Adobe photoshop, Procreate, Krita, Adobe after effect)
Facilitation techniques	<ul style="list-style-type: none"> ▪ Group discussion ▪ Individual practical Exercises ▪ Presentation ▪ Peer review
Formative assessment methods /(CAT)	<ul style="list-style-type: none"> ▪ Written assessment ▪ Oral presentation ▪ Performance assessment

Learning outcome 2: Make a character profile

Learning hours: 20

Indicative content

- **Introduction to character profile**

- ✓ The role of character profile
- ✓ Key elements of character profile
 - ✚ Physical description personality
 - ✚ Traits background and history
 - ✚ Motivations and goals
 - ✚ Strengths and weaknesses
 - ✚ Relationships
 - ✚ Beliefs and values
 - ✚ Backstory
 - ✚ Arc and development
 - ✚ Internal and external conflicts

- **Visual Analysis of mood board**

- ✓ Composition
- ✓ Colors
- ✓ Shapes
- ✓ Textures
- ✓ Character's emotion
 - ✚ Feelings
 - ✚ Expressions
- ✓ Personality traits and physical attributes
 - ✚ Facial expressions
 - ✚ Body language
 - ✚ Interactions
 - ✚ Facial features
 - ✚ Body types
 - ✚ Clothing styles

- **Identification of character's background information**

- ✓ Cultural and ethnic
 - ✓ Socioeconomic status
 - ✓ Occupation and skills
-
-

<ul style="list-style-type: none"> ✓ Goals and motivations ✓ Beliefs and values ✓ Hobbies and interests • Create character profile sheet/documents. <ul style="list-style-type: none"> ✓ Psychological information ✓ Physical information ✓ Social information 	
Resources required for the learning outcome	
Equipment	Computer, graphic tablets, sketch pad
Materials	Notepad, pen, internet, paper, pencil, eraser, pen tablet
Tools	Editing software (adobe illustrator, adobe photoshop, procreate, krita, adobe after effect)
Facilitation techniques	<ul style="list-style-type: none"> ▪ Group discussion ▪ Individual practical exercises ▪ Presentation ▪ Peer review
Formative assessment methods /(CAT)	<ul style="list-style-type: none"> ▪ Written assessment ▪ Oral presentation ▪ Performance assessment

Learning outcome 3: Create concept art	Learning hours: 30
Indicative content	
<ul style="list-style-type: none"> • Introduction to concept arts <ul style="list-style-type: none"> ✓ Role of concept arts ✓ Elements of concept arts • Creation of thumbnail Sketches <ul style="list-style-type: none"> ✓ Poses ✓ Expressions ✓ Compositions • Development of characters silhouette 	

- ✓ Use of movement and poses.
 - ✚ Description of line of action
 - ✚ Using 3D forms to show human body parts.
 - ✚ Human anatomy
- ✓ Producing rough sketches
 - ✚ Introduction to rough sketches
 - ✚ Producing rough sketches by construction lines
- ✓ Application of proportion
 - ✚ Definition of proportion
 - ✚ Several types of proportion
 - ✚ Human figure proportions drawing
- ✓ Types of foreshortening in drawing
 - ✚ One-point perspective
 - ✚ Two-point perspective
 - ✚ Three-point perspective
- ✓ **Use of blocking-In**
 - ✚ Blocking in description
 - ✚ Using simple geometric shapes
 - ✚ Establishing major forms and proportions of the subject
- ✓ **Creation of gesture drawing**
 - ✚ Establishing the line of action
 - ✚ Emphasize key points.

- **Physical attributes and assets of a character**

- ✓ Adding accessories and clothing
 - ✚ Tight-fitting garments
 - ✚ Flowing robes
 - ✚ Belts
 - ✚ Hats

- **Designing character expressions**

- ✓ Happiness/Joy
 - ✚ Smiling Face
 - ✚ Raised eyebrows.
 - ✚ Wide eyes
 - ✚ Open mouth

- ✓ Sadness
 - ✚ Downturned mouth
 - ✚ Droopy or furrowed eyebrows
 - ✚ Teardrops or watery eyes
- ✓ Anger
 - ✚ Scowling or frowning face
 - ✚ Narrowed eyebrows.
 - ✚ Tense jawline
 - ✚ Clenched fists
- ✓ Surprise
 - ✚ Wide eyes
 - ✚ Raised eyebrows.
 - ✚ Open mouth
- ✓ Fear
 - ✚ Wide eyes
 - ✚ Raised eyebrows.
 - ✚ Open or partially open mouth
 - ✚ Tense or widened stance.
- ✓ Confusion
 - ✚ Raised or uneven eyebrows
 - ✚ Tilted head.
 - ✚ Perplexed or questioning expression.
- ✓ Excitement
 - ✚ Wide eyes
 - ✚ Raised eyebrows.
 - ✚ Open mouth
 - ✚ Energetic or enthusiastic posture
- ✓ Determination
 - ✚ A focused or intense expression
 - ✚ Narrowed eyes.
 - ✚ Furrowed eyebrows
 - ✚ Tightly closed or determined mouth.
- ✓ Curiosity
 - ✚ Raised eyebrows.

🔧 Widened eyes.

🔧 Forward leaning or inquisitive posture

- **Producing a character**

- **Refining and polishing**

- ✓ Erasing unwanted lines
- ✓ Adding missing details

Resources required for the learning outcome

Equipment	Computer, graphic tablets, sketch pad
Materials	Notepad, pen, internet, paper, pencil, eraser, pen tablet
Tools	Editing software (adobe Illustrator, adobe photoshop, procreate, krita, adobe after effect)
Facilitation techniques	<ul style="list-style-type: none">▪ Group discussion▪ Individual practical Exercises▪ Presentation▪ Peer review
Formative assessment methods /(CAT)	<ul style="list-style-type: none">▪ Written assessment▪ Oral presentation▪ Performance assessment

Learning outcome 4: Render character

Learning hours: 25








Indicative content

- **Setting up software environment**

- ✓ Select software.
- 🔧 Based operating system.
- 🔧 Based on 2D character design software features
- 🔧 Hardware requirements
- ✓ Installation of 2D design software

- **Tracing a character**












- ✓ Prepare designed characters.
- 🔧 Scan
- 🔧 Capturing image








-  Import
- ✓ Use software features.
 -  Layer panel
 -  Drawing tools
 -  Selection and transformation tools
 -  Color palette and swatches tools
 -  Fill and gradient tools
 -  Brush customization

- **Finalizing character**

- ✓ Erasing unwanted lines
- ✓ Smoothing out rough lines
- ✓ Correcting proportions and symmetry
- ✓ Adding missing details
- ✓ Cleaning up smudges and marks
- ✓ Enhancing or refining lines
- ✓ Checking for accuracy

- **Exporting files**

- ✓ Selection of image file formats
 -  JPEG
 -  PNG
 -  GIF
 -  BMP
 -  TIFF
 -  SVG
 -  PSD
- ✓ Select resolution and dimensions.
- ✓ Compression and quality settings
 -  Lossless
 -  Lossy
- ✓ Choose color mode.
 -  RGB
 -  CMYK

-  Grayscale
-  Indexed Color
- ✓ Layer management
-  Merge
-  Flatten file.
- ✓ Organization and naming of output
- ✓ File transferring and backup storage
-  External drive
-  Cloud
-  Other storage devices

Resources required for the learning outcome

Equipment	Computer, graphic tablets, sketch pad
Materials	Notepad, pen, internet, paper, pencil, eraser, pen tablet
Tools	Editing software (adobe illustrator, adobe photoshop, procreate, Krita, adobe after effect)
Facilitation techniques	<ul style="list-style-type: none"> ▪ Group discussion ▪ Individual practical Exercises ▪ Presentation ▪ Peer review
Formative assessment methods /(CAT)	<ul style="list-style-type: none"> ▪ Written assessment ▪ Oral presentation ▪ Performance assessment

Integrated/Summative assessment.

Integrated situation

ANTHOOD, a Swedish animation company specializing in both 2D and 3D animation, recently entered into an agreement with the **IMBUTO Foundation**. The purpose of this collaboration is to develop educational animations and games aimed at raising awareness among Rwandan teenagers about reproductive health. As part of the agreement, it was stipulated that 70% of the production team must consist of Rwandan freelancers. The pre-production phase has already been completed, and now ANTHOOD is planned to hire a 2D Character designer because their first one was not competent for creating 2D character, that why

ANTHOOD needs skilled designers to contribute to the production stage. So, you have been hired as a 2D character designer and assigned the task of creating a **main character** for the project based on a detailed script provided by the company. You are expected to accomplish the following tasks within a time frame of **6 hours**:

1. Create a mood board to gather visual references and inspiration for the character designs.
2. Develop character profiles that outline the background, personality traits, and visual attributes of each character.
3. Produce concept art that visually represents the appearance and style of the characters, taking into consideration the target audience and the educational nature of the project.
4. Render the final characters using Adobe Illustrator (AI) or Adobe Photoshop (PSD) software, saving them in .png or .jpg formats for further use.

Resources

Tools	<ul style="list-style-type: none"> 2D Character design software: Adobe photoshop, adobe Illustrator, clip studio paint coral painter, Krita, procreate moho on boom harmony. Internet
Equipment	<ul style="list-style-type: none"> Computer, graphic tablets, sketch books, sketch pad
Materials/ Consumables	<ul style="list-style-type: none"> Pencils, drawing pen, external hard disks, flash disks

Assessable outcomes	Assessment criteria (Based on performance criteria)	Indicator	Observation		Marks allocation
			Yes	No	
1. Create a mood board	Interpret the script.	The component of story is identified			2
		Types of characters are identified			2
		General purpose of the character is determined			2

		Character is described			2
	Note down general mood.	Mood and atmosphere is noted down			2
		Primary emotions are noted down			2
		Character's mood changes are identified and noted			2
	Identify the look and personality traits.	Physical appearance is identified			2
		Clothing style body is identified			2
		Language and facial expressions are identified			2
		Behavior and actions are identified			2
	Gather reference materials.	Source of reference are explored, and reference materials are selected			2
	Produce a mood board	Collage photos are made			2
		Layering and resizing are performed			2
		Final composition is made			2
2. Develop character profile	Mood board	Visual style of mood board is analyzed			2
		Character's emotion is analyzed			2
		Characters are described			2

	Personality traits and physical attributes	Facial expressions and body language are identified			2
		Body type and clothing styles are identified			2
		Character interactions is identified			2
	Background information is identified.	Goals and motivations			2
		Cultural and ethnic			2
		Beliefs and values			2
	Character profile sheet is created	Psychological information is written			2
		Physical information is written			2
		Social information is written			2
3. Produce concept art	Developing thumbnail Sketches	Character's poses are designed			2
		Expressions are added			3
		Compositions is created			3
	Development of characters silhouette	Rough sketches are produced			3
		Movement and poses are used			3
		Proportion is applied			3
		Blocking-In is used			3
		Gesture drawing is created			3
	Physical attributes and assets of a character	Accessories and clothing are added			3
		Character expressions are designed			3

		Character is designed and refined			3
4. Perform Rendering	Setting up software environment	Software is selected			2
		Software is installed			2
	Tracing a character	Characters is prepared			2
		Software features are used			2
	Finalizing character	Unwanted lines are erased			2
		Proportions and symmetry are corrected			2
		Missing details are added			2
Total marks		100			
Percentage Weightage		100%			
Minimum Passing line % (Aggregate): 70%					

References

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 10. Sito, T. (2013). *Timing for Animation (Second Edition)*. Focal Press.
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