SUMMARY INTERNAL ASSESSMENT SCHEDULE

The following summary schedule must be completed by the teacher of PSSC Computer Studies and returned to SPBEA by the 1st March of the year the programme is being taught.

School: Queen Salote College   Teacher: 'Etuate Manuofetoa   Date: March 23, 1998

Topic	Assessment Method	Weight	Brief Description	Completion Date
1 (Compulsory) Computer Operating Systems	1a Observation	4	Check list (p.23)	Mar 27
	1b Common Assessment Task 1	15	The CAT will be sent by SPBEA in time to be sat in the week before completion date. Marked CATs must be returned to SPBEA postmarked no later than April 30.	April 15
2 (Compulsory) Word-processing Spreadsheets Databases	2a Observation	6	Check lists (pp24-26)	~~Apr. 9~~ August 15
	2b Common Assessment Task 2 Common Assessment Task 3 Common Assessment Task 4	10 10 10	Send to SPBEA by June 15. Send to SPBEA by July 30. Send to SPBEA by Sept. 15.	May 31 July 15 August 31
3 Computer Programming	~~Teacher designed task 1~~	~~10~~		~~Apr. 24~~
	Teacher designed task 2	15		May 6
	Teacher designed task 3	15		May 22
4 Desktop Publishing 7 PC Presentation	Teacher designed task	15		Oct. 26
Total IA programme		**100%**		

Note: **EITHER** delete the two rows for the computer programming option, **OR** delete two rows for other optional topics.

INTERNAL ASSESSMENT PROGRAMME

Topic 3 Programming Internal Assessment
Project Assessment 1: - 15%

Write a program to calculate the area of a number of different mathematical shapes with the below sample output.

The program must show use of exit-condition loop structure, conditional statements, and a design methodology including flow-chart is required.

Your submitted work will include the following:-
- ❑ The Five Design steps discussed in class to develop a program.
- ❑ Flow Chart
- ❑ Program Source Code
- ❑ Signed validation of Program execution

Sample Output
[Main Menu]
This program will let you calculate the area of any of the below selected shapes, using the standard mathematical formulas. Select a Shape by typing the number corresponding to the shape.

> 1. Square
> 2. Rectangle
> 3. Triangle
> 4. Parallelogram
> 5. Trapezoid
> 6. Rhombus
> 7. Circle
>
> 0. Quit

[Select an option to continue]

(sample selection of option 6, the screen disappears and displays the following)

[6. Rhombus]
The area of a rhombus is calculated with the formula a=bh.
b: what is the base ? ____
h: what is the height? ____

The area for the rhombus is ____

(sample selection of option 0, the screen disappears and displays the following)

[0. Quit]
Thank-you for using our software
(c) 1998 Royal Blue Enterprises
Author: _____
Date: _____

The Project AC Table

Achievement Criteria	Activity
	The student is to:
3.1.1	Apply problem analysis and decision making to problems
3.1.2	Apply principles of logic flow in relation to problem solving
3.2.1	Demonstrate problem specification using structure diagrams and at least on other method such as flowcharts, decision trees, decision tables
3.2.2	Research a problem in terms of input/output requirements
3.2.4	Identify features of a program that would solve a problem; *Range: iteration, decision making.*
	Range: Programs contain sequence, selection, and repetition.
3.3.1	Define and use variables, and name them so they describe the purpose for which they are created
3.3.4	Display the full range of file management skills in handling the code files, and word-processing skills in writing the code
3.3.5	Write program code which leads to the solution of the problem as specified.

Marking Schedule

Activity	Marks			Section Totals
Apply Problem Analysis				40 marks
Complete coverage of 5 step process	15			
Mostly covered, 4 steps		10		
Partly covered, at least 3 steps			5	
Insufficient evidence, less than 3 steps				0
Design attempts to solve stated problem			5	
Design does not attempt to solve problem				0
Comparison logic				
Correctly identified & used		10		
Attempted but not correct			5	
Not evident				0
Repetition Logic				
Correctly identified & used		10		
Attempted but not correct			5	
Not evident				0
Decision Flow				10 marks
Flow chart accurately reflects program design	10			
Flow chart mostly reflects design, 3 or less differences		5		
Flow chart differs significantly, greater than 3 differences			0	
Programming				11 marks
Define and use of Variables				
Definition and Declaration				
All variables declared	5			
Most variables declared (fewer than 2 undeclared)		4		
Fewer than half declared/defined			3	
No evidence of declaration				0
Meaningful Variables				
All meaningful		2		
Some meaningful			1	
None meaningful				0
Documentation				
Good documentation comments		5		
Poor documentation comments			2	
No documentation comments				0
File Management				
Evidence file saved		1		
No evidence file saved			0	

Operation		5 marks
Code functions as designed	5	
Code functions but not as designed	3	
Code does not operate	0	
	Total	**66 marks**

Project Assessment 2: - 15%

Program Design Logic.

You have been assigned the task of developing a program to simulate the game of "Craps". You are being supplied with the logic of the game and a flow chart of how the program game should flow. Write the QBasic program and make any corrections, modifications to the logic as is required. *The game rule can be accepted as true and will be from which the program code will be compared.*

The game should allow the option for the player to throw the dice, quit, and continue with another game.

Craps, a dice game: Game Rules

Number of Dice: 2

1st Throw:

➢ If sum of the dice is 7 or 11, the dice player wins
➢ If sum of the dice is 2 or 3 or 12, the player loses
➢ All other numbers become the player's "points"

2nd and subsequent throws

➢ If the sum of the dice is 7, the player loses and loses a turn
➢ If the sum of the dice is equal to the player's points, the player wins.

Your submitted work will include the following:-

❑ The Five Design steps discussed in class to develop a program.
❑ Flow Chart
❑ Program Source Code
❑ Signed validation of Program execution

A minimalist flow chart of the logic with no intentional errors is supplied

The Project AC Table

Achievement Criteria	Activity
	The student is to:
3.1.1	Apply problem analysis and decision making to problems
3.1.2	Apply principles of logic flow in relation to problem solving
3.2.1	Demonstrate problem specification using structure diagrams and at least on other method such as flowcharts, decision trees, decision tables
3.2.2	Research a problem in terms of input/output requirements
3.2.4	Identify features of a program that would solve a problem; *Range: iteration, decision making.*
	Range: Programs contain sequence, selection, and repetition.
3.3.1	Define and use variables, and name them so they describe the purpose for which they are created
3.3.4	Display the full range of file management skills in handling the code files, and word-processing skills in writing the code
3.3.5	Write program code which leads to the solution of the problem as specified.

Marking Schedule – Project 2

Activity	Marks		Section Totals
Apply Problem Analysis			40 marks
Complete coverage of 5 step process	15		
Mostly covered, 4 steps		10	
Partly covered, at least 3 steps		5	
Insufficient evidence, less than 3 steps		0	

Design attempts to solve stated problem		5		
Design does not attempt to solve problem			0	
Comparison logic				
Correctly identified & used	10			
Attempted but not correct		5		
Not evident			0	
Repetition Logic				
Correctly identified & used	10			
Attempted but not correct		5		
Not evident			0	
Decision Flow				10 marks
Flow chart accurately reflects program design	10			
Flow chart mostly reflects design, 3 or less differences		5		
Flow chart differs significantly, greater than 3 differences			0	
Programming				11 marks
Define and use of Variables				
Definition and Declaration				
All variables declared	5			
Most variables declared (fewer than 2 undeclared)		4		
Fewer than half declared/defined			3	
No evidence of declaration				0
Meaningful Variables				
All meaningful		2		
Some meaningful			1	
None meaningful				0
Documentation				
Good documentation comments		5		
Poor documentation comments			2	
No documentation comments				0
File Management				
Evidence file saved			1	
No evidence file saved				0
Operation				5 marks
Code functions as designed		5		
Code functions but not as designed			3	
Code does not operate				0
	Total			**66 marks**

Topic 4 Desktop Publishing on a Personal Computer

The student is to select a former project, such as a summary of their Form 5 Tongan Studies Booklet or English Booklet that covers at least TWO pages that will display skills in the Achievement Criterias listed below.

The Project AC Table

Achievement Criteria	Activity
	The student is to:
4.2.3	Load a pre-formatted word-processed document into the DTP, edit, and reformat properly
4.2.4	Place a graphics file; size and move it to an appropriate place in the document
4.2.5	Use lines, boxes, headlines, multi-columns, text flow and other available options to enhance the document
4.26	Add & remove pages as required without loss of essential data

Marking Schedule

Activity	Marks	Section Totals
Text Importation		8 marks
Edited and reformatted as specified	8	
Attempted edit/reformat but not as specified	6	
Imported but no edit/reformatting evident	4	
No evidence of successful import	0	
Graphics Files		4 marks
Placed, sized as specified	4	
Attempted place, size, but not as specified	3	
Graphic imported but size not evident	2	
No evidence of graphics manipulation	0	
Use of Drawing Items		2 marks
Evidence of using of Lines	1	
Evidence of using boxes	1	
Story Design		6 marks
Evidence of use of Headlines	2	
Evidence of use of multi-columns	2	
Evidence of use of text flow	2	
Page Editing – Add / Remove Pages without loss of essential data		1 mark
Evidence	1	
No evidence	0	
Design Features		9 marks
Clarity of Message	3	
Clear and Effective Layout	3	
Effective use of other features	3	
	Total	**30 marks**

Topic 7 Using Personal Computers to Make Computer Presentations

Select a topic of your choice for which at least 4 graphics will be used together with text. The student project must contain the following:

- ❑ A cover page with description of topic
- ❑ A description of the purpose of the presentation and intended audience
- ❑ A how-to page describing the technologies used for developing the presentation
- ❑ Rough sketch plans of presentation;
- ❑ Rough sketch of web-page navigation/links;
- ❑ Integrated computer text and graphics;
- ❑ Printouts of each presentation screen

The Project AC Table

Achievement Criteria	Activity
	Students should be able to:
7.1.1	Demonstrate awareness of the potential that different applications have for supporting presentations
7.1.2	Identify features of particular applications which would be useful in the development of material for presentation
7.1.3	Select features from applications which are to be incorporated within a presentation.
7.2.1	Construct a paper plan of a presentation which identifies applications to be used in the development of material for presentation
7.2.2	Identify and select particular features of applications which are to be incorporated within the presentation
7.3.1	Construct elements of the presentation in appropriate applications
7.3.2	Organise the material within the files of the applications
7.3.3	Draw together material from the files of the applications to compile as a single complete presentation
7.4.1	List the decisions which were taken in the choices made in the construction process
7.4.2	Describe elements of sound practice which were considered during the construction process
	The information must
7.5.1	Be communicated to the target audience
7.5.2	Meet its design specifications

Marking Schedule

Activity	Marks	Section Totals
Presentation Planning		18
Description of topic,	2	
Reference information source	2	
Description of target audience	2	
Identification of technology to be used and how	2	
Sketch plans of computer screens		
Consistent with design goals	2	
Indicates flow between screens	2	
Indicates presentation elements to be used	4	
Draws logical conclusions to presentation	2	
Presentation is		10
Consistent with its design	1	
Correctly edited	2	
Suitably formatted	2	
Relevant	2	
Well organised	2	
Meets its design plan	1	

Presentation Development			24
Correct use of <TITLE> tag		2	
Correct use of <BODY> tag		2	
Evidence of animation sequences		2	
Logical progression between pages			
Clear evidence	10		
Some evidence of logic flow		3	
No evidence of logic flow		0	
Graphics Elements			
Consistent with presentation		3	
Inconsistent with presentation		0	
Independent Exploration of Topic			
Consistent links within presentation	5		
Inconsistent links within presentation	3		
Fewer than 10 internal links (independent of navigational links)		0	
Delivery of Message			2
Test audience comprehends the message	2		
Test audience has some understanding	1		
Test audience is perplexed		0	
	Total		**54 marks**