Scope and Sequence Document for: IGCSE Computer Science

Tutor	Ruth Marvin		
Tutor qualifications:	BSc (St Joseph's), MBA (Schiller), PGCE (Sussex)	IGCSE/A level Exam board & Specification No:	IGCSE Computer Science CAIE 0478
Resources required:	Cambridge IGCSE Computer Science Coursebook, (2015) Sarah Lawrey and Donald Scott, ISBN – 9781107518698, CUP; Cambridge IGCSE Computer Science Programming Book for Python, (2017), Chris Roffey, ISBN – 9781316617823, CUP.		

Module No.	NSW week No.	Week beginning Monday the:	Contents of study
0	1	05/09/22	Review and installation week
1a	2	12/09/22	Data representation – binary and denary numbers
	3	19/09/22	Data representation - hexadecimals
	4	26/09/22	Data representation – storage and compression
1b	5	03/10/22	Programming week
	6	10/10/22	
2a	7	17/10/22	Communication and internet technologies – data transmission
	8	24/10/22	Half Term
2a (Cont.)	9	31/10/22	Communication and internet technologies – security
	10	07/11/22	Communication and internet technologies – internet principles
2b	11	14/11/22	Programming week
	12	21/11/22	
3a	13	28/11/22	Computer architecture – von Neumann machines
	14	05/12/22	Computer architecture – operating systems and interrupts
	15	12/12/22	Computer architecture – programming languages
	16	19/12/22	Christmas Holiday
	17	26/12/22	Christmas Holiday
	18	02/01/23	Christmas Holiday

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3b	19	09/01/23	Programming week
	20	16/01/23	
4a	21	23/01/23	Logic gates – components
	22	30/01/23	Logic gates – circuits
4b	23	06/02/23	Programming week
	24	13/02/23	
	25	20/02/23	Half Term
5a	26	27/02/23	Input devices – keyboards and mice
	27	06/03/23	Input devices – scanners
	28	13/03/23	Input devices – digital cameras, touch screens, whiteboards
	29	20/03/23	Input devices – microphones and catch up
5b	30	27/03/23	Programming week
	31	03/04/23	Easter Holiday
	32	10/04/23	Easter Holiday
	33	17/04/23	Easter Holiday
5b	34	24/04/23	Programming week
6a	35	01/05/23	Sensors – light and temperature
	36	08/05/23	Exam week
6a (Cont.)	37	15/05/23	Sensors – motion and magnetic field sensors
	38	22/05/23	Sensors – gas, pressure, moisture and pH
	39	29/05/23	Half Term
6b	40	05/06/23	Programming week
	41	12/06/23	
7a	42	19/06/23	Output devices - displays
	43	26/06/23	Output devices – projectors and printers
NSW Summer holiday period – 3 July – 4 September 2023			
7a (Cont.)	1	04/09/23	Output devices – computer-aided manufacturing
	2	11/09/23	Output devices – speakers, headphones and actuators
7b	3	18/09/23	Programming week
	4	25/09/23	

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8a	5	02/10/23	Memory – types of memory
	6	09/10/23	
	7	16/10/23	
	8	23/10/23	Half Term
8a (Cont.)	9	30/10/23	Memory – file size
8b	10	06/11/23	Programming week
	11	13/11/23	
9a	12	20/11/23	Security – prevention and verification
	13	27/11/23	Security - infections
	14	04/12/23	Security – protection against attack
	15	11/12/23	Security – protection and protocols
	16	18/12/23	Christmas Holiday
	17	25/12/23	Christmas Holiday
	18	01/01/24	Christmas Holiday
9b	19	08/01/24	Programming week
	20	15/01/24	
10a	21	22/01/24	Ethics - copyright
	22	39/01/24	Mock exam
10a (Cont.)	23	05/02/24	Ethics – freeware and communications
10b	24	12/02/24	Programming week
	25	19/02/24	Half Term
10b (Cont.)	26	26/02/24	Programming week
11a	27	04/03/24	Databases - structure
	28	11/03/24	Databases – data types and primary keys
	29	18/03/24	Databases – relational databases and searches
	30	25/03/24	Easter Holiday
	31	01/04/24	Easter Holiday
	32	08/04/24	Easter Holiday
11a	33	15/04/24	Databases – validation and catch up
	34	22/04/24	
	35	19/04/24	
	36	06/05/24	
	37	13/05/24	

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	38	20/05/24	
	39	27/05/24	Half Term
	40	03/06/24	
	41	10/06/24	
	42	17/06/24	
	43	24/06/24	

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