

Y10 Computing SoW - 2015-16

Items in bold to be used for departmental tracking assessments

(NB: WINS required approx. once per cycle - the items in bold should count!)

	Theory	Programming
Week 1 & 2	Basic hardware, strip a PC, input and output devices	Problem solving, logic puzzles, get comfortable getting stuck
Week 3 & 4	Storage devices - magnetic, optical, solid state. Strip a HDD if available.	Scratch programming - simple tutorials, refer back to specific elements (If, For, While, etc.)
Week 5 & 6	Memory - RAM vs ROM, Cache/RAM/VM. Start CPU if time.	Start with Python - basic inputs and outputs.
Week 7 & 8	CPU - Cache, clock speed, cores. Test to finish.	Python Arithmetic - including casting/int(input())
HALF TERM		
Week 1 & 2	Binary numbers - units (bits, bytes, kB, MB, etc.) and binary/denary conversion	Python IF statements. Plenty of problems to solve. Introduce flowcharts if not done already
Week 3 & 4	Hexadecimal/conversion/purpose - use a hex editor if possible and character sets	Python assessment - multiple choice quiz (from Level 1 course)
Week 5 & 6	Storing images and sound	Python Loops - start with Turtle module (using FOR loops). Bring back to more text-based programs
Week 7	Test	Python Loops - condition controlled (WHILE). Lots more problems to try
CHRISTMAS		
Week 1 & 2	Software - Classification (application, utility, OS). Recall different utility SW	Python - functions and procedures (go back to Turtle module if helpful)
Week 3 & 4	Software - OS features and bespoke/off the shelf application SW	Python - Lists. Need a good grounding in use of loops.
Week 5 & 6	Software - Proprietary vs Open Source. Test to finish.	Python - File handling. Combined with use of lists.
HALF TERM		
Week 1 & 2	CA - A453 - Part 1 complete!	

	Theory	Programming
Week 3 & 4	Database - practical flat file issues including tables, forms, queries, reports. Validation.	Recap and practice key skills as necessary
Week 5		
EASTER		
Week 1		Recap and practice key skills as necessary
Weeks 2 & 3	CA - A453 - Part 2 complete! (NB: 1 day off timetable in Wk 2)	
Week 5 & 6	CA - A453 - Part 3	
HALF TERM		
Week 1 & 2	CA - A453 - Part 3 complete!	
Week 3 & 4	Database - relational database. Advantages of related tables. Further practical re-enforcement.	
Week 5 & 6	DB theory - purpose of DBMS, etc. and test to finish.	
Week 7	As required...	
SUMMER		

Y11 Computing SoW for 2015-16

	Content
Week 1 & 2	Networking - Topologies, HW, compare standalone, client-server/p2p
Week 3 & 4	LAN / WAN, network policies, test to finish. Python recap
Week 5 & 6	A453
Week 7 & 8	A453 - done, dusted, finished, marked
HALF TERM	
Week 1 & 2	A452 - brief intro, then go for it
Week 3 & 4	A452
Week 5 & 6	More A452
Week 7	Probably bored of A452 now...
CHRISTMAS	
Week 1 & 2	Internet - hardware (modems), IP, DNS, more HTML
Week 3 & 4	Internet - file types and compression and test to finish
Week 5 & 6	More A452
HALF TERM	
Week 1 & 2	Drag out the last dregs of A452 - official internal deadline
Week 3 & 4	Start revision - as needed
Week 5	Revision. Actual internal deadline for A452
EASTER	
Week 1 & 2	Revision. As needed.
Week 3 & 4	
Week 5 & 6	
HALF TERM - STUDY LEAVE	