

Pre-learning for computer science A-level : OCR H446

Specification

<https://www.ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/>

By far the things which take up the most amount of time are:

- a) Learning python to a reasonable level
- b) Spending time choosing a coursework idea & Getting started on the coursework (NEA)

Therefore by that reckoning, the ideal task(s) would be:

1	<p>Learning Python really should be your main priority whether you are Y11, Y12 or Y13. The more you know, the better your overall grade will be and will be much less stressful!</p> <p>You should absolutely try and download Thonny too https://thonny.org/</p> <p>Sign up for https://snakify.org/ and then complete as many exercises as possible. When it asks for your teacher's email address then my email is irobinson@stalbans-staff.org This way I can track your progress and see what you have done when you get back in September.</p> <p>Don't turn up in September having done no python as you will soon regret it when you need to catch up!</p>
2	<p>If you are around, before you go on holidays, borrow one of these books from me (or buy one or try to find pdf online)</p> <p>https://www.dk.com/us/book/9781465473615-coding-games-in-python/</p> <p>I would suggest you create a few of these games to get used to pygame zero. Maybe even pick an arcade game (think frogger, space invaders etc) to reproduce or do your own game for the basis of your coursework</p>

Books you can purchase for the course

	Essential
	https://www.pgonline.co.uk/resources/computer-science/a-level-ocr/clearrevise-exam-tutor-h446/
	We will be using this website throughout the course https://adacomputerscience.org/
	Would be good to have
	https://www.pgonline.co.uk/resources/computer-science/a-level-ocr/ocr-a-level-textbook/

	https://nostarch.com/python-crash-course-3rd-edition
	Background reading
	https://www.dk.com/us/book/9781465473615-coding-games-in-python/
	https://www.amazon.co.uk/Grokking-Algorithms-illustrated-programmers-curious/dp/1617292230
	https://www.pgonline.co.uk/resources/computer-science/a-level-ocr/tackling-ocr-a-level-projects-in-computer-science/
	https://www.pgonline.co.uk/resources/computer-science/gcse-aqa/learning-to-program-in-python/