



Hanley Castle High School Curriculum Outline for parents: **Computer Science (KS4)**

		<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
<b>Year 9</b>	<b>Topics</b> SLR 1 – Systems Architecture  SLR 2 – Memory and Storage  SLR 3 – Computer Networks  SLR 4 – Network Security  SLR 5 – Utility Software	<b>Introduction</b> <ul style="list-style-type: none"> <li>• Good file management</li> <li>• Intro to flipped learning and course structure.</li> </ul> <b>SLR 1 – Systems Architecture</b> <ul style="list-style-type: none"> <li>• 1.1.1 - Architecture of the CPU</li> <li>• 1.1.2 - CPU performance</li> <li>• 1.1.3 - Embedded systems</li> </ul> <b>SLR 2 – Memory and Storage</b> <ul style="list-style-type: none"> <li>• 1.2.1 - Primary storage (Memory)</li> <li>• 1.2.2 - Secondary storage</li> </ul>	<ul style="list-style-type: none"> <li>• 1.2.3 - Units</li> <li>• 1.2.4 - Data storage Numbers</li> <li>• 1.2.5 - Compression</li> </ul> <b>1.3.1 Computer Networks, Connections and Protocols</b> <ul style="list-style-type: none"> <li>• 1.3.1 – Networks and Topologies</li> <li>• 1.3.2 – Wired and wireless networks, protocols and layers</li> </ul>	<b>1.4 Network Security</b> <ul style="list-style-type: none"> <li>• 1.4.1 - Threats to computer systems and networks</li> <li>• 1.4.2 - Identifying and preventing vulnerabilities.</li> </ul> <b>1.5 Systems Software</b> <ul style="list-style-type: none"> <li>• 1.5.1 – Operating systems</li> <li>• 1.5.2 – Utility software</li> </ul>
	Disciplinary knowledge/skills	Python programming is undertaken throughout the term	Python programming is undertaken throughout the term	Python programming is undertaken throughout the term