Denton Community College

Departmental Curriculum Map

Subject: Computer Science **Year Group:9**

	Lessons 1 - 3	Lessons 4 - 5	Lessons 6 - 8	Lessons 9 - 10	Lessons 11 - 13
Topics	Baseline assessment and online safety	Creative and graphical computer science	AI and Machine Learning	Hardware and software	iDEA – Work towards Bronze award
What will students during this unit?	Students receive updated information regarding online safety and a reminder of expectations online. Also, students complete a baseline assessment.	Students complete a series of create tasks which create pixel art. Students look in depth at how images are made on digital screens. Students will get the opportunity to use graphic manipulation software to create a final collage image. This helps prepare students for GCSE Topic – 2 Data	Students learn the difference between AI and ML, and its impact on society. This helps prepare students for GCSE Topic 5 – Ethics concerns.	Students learn the difference between hardware and software in deepening their knowledge of fundamental concepts within computer science. This helps prepare students for GCSE Topic 3 – Computer.	Students apply what they have learnt and work towards their bronze award within iDEA. This award supports students' level of digital literacy. This is a focus on the programming badges which will help prepare students for GCSE Topic 6 - Programming
When will students be assessed?	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.	Twice per half term, which is equal to once every two weeks.
How will students be assessed?	• Baseline digital assessment • Low-stakes lesson quiz	• Low-stakes lesson quiz • midway assessment	• Low-stakes lesson quiz	• Low-stakes lesson quiz	• Low-stakes lesson quiz • End of unit written assessment
Key Vocabulary	Online behaviour, digital footprint, data, PEGI, respectful.	Pixel, image, megapixel camera, RGB, file size, collage, file size, file type,	Ethical issues, impact, prediction, model, machine learning, Artificial intelligence	Input, output, devices, fetch, decode and execute, system software, application software	

Homework opportunities to broaden or deepen student knowledge	IDEA is used for homework which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific “badges” which encourage further knowledge of topic.	IDEA is used for homework which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific “badges” which encourage further knowledge of topic.	IDEA is used for homework which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific “badges” which encourage further knowledge of topic.	IDEA is used for homework which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific “badges” which encourage further knowledge of topic.	IDEA is used for homework which encourages a broad and balanced view of digital literacy outside of computer science. Students aim for a bronze award by the end of Y7 and silver by end of Y9. Lessons link to specific “badges” which encourage further knowledge of topic.
Links to the National Curriculum	Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns.	Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.	Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns.	Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.	Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.