KS4 - Year 10 – Digital - Curriculum Long Term Planning – 23-24

Year 10 Digital	HT1 Sept – Oct (8 weeks)	HT2 Nov – Dec (7 weeks)	HT3 (Jan – Feb (6 weeks)	HT4 Feb – Apr (6 weeks)	HT5 Apr – May (6 weeks)	HT6 Jun – Jul (6 weeks)
Topic Big Idea/Question	**Component 1 Learning Aim A:** Understand interface design for individuals and organisations	**Component 1 Learning aim B:** Use project planning techniques to plan and design a user interface	**Component 1 Learning aim C:** Develop and review a user interface	**Controlled assessment Component 1** Learners to work on a specific project allocated.	**Component 2 Learning Aim A:** Investigate the role and impact of using data on individuals and organisations	**Component 2 Learning aim B:** Create a dashboard using data manipulation tools
Why this and why now? What is the content doing here? How does it integrate to prior learning or prepare students for future learning? Is it an opportunity for cumulative learning or to achieve proficiencies? Does it provide a step to collective sufficiency?	**Prep work component 1 learning A** ***Why now?*** Key knowledge and understanding of subject specific terminology will allow students to be fully prepared for internal assessment and external assessment. Underpinning knowledge needed for (Component 3)	**Prep work component 1 learning B** ***Why now?*** Key knowledge and understanding of subject specific terminology will allow students to be fully prepared for internal assessment and external assessment. Underpinning knowledge needed for (Component 3)	**Prep work component 1 learning C** ***Why now?*** Key knowledge and understanding of subject specific terminology will allow students to be fully prepared for internal assessment and external assessment. Underpinning knowledge needed for (Component 3)	**Controlled assessment Component 1** ***Why now?*** Learners must complete CA in controlled conditions and within the time frame agreed by the exam board. There is a finite amount of time to do this. The window opens in February and closes in May to complete the assessment. Underpinning knowledge needed for (Component 3)	**Prep work component 2 learning Aim A** Prep work for component 3. ***Why now?*** Key knowledge and understanding of subject specific terminology will allow students to be fully prepared for internal assessment and external assessment. Underpinning knowledge needed for (Component 3)	**Prep work component 1 learning Aim B** Prep work for component 3. ***Why now?*** Key knowledge and understanding of subject specific terminology will allow students to be fully prepared for internal assessment and external assessment. Underpinning knowledge needed for (Component 3)
What is the essential knowledge that needs to be remembered?	**C1. Learning Aim A:** Learners will carefully consider how effectively two different types of user interface meet a wide range of user interface design	**C1. Learning Aim B:** Learners make full and effective use of project planning techniques. Learners will set smart aims and objectives for their project. They will	**C1. Learning Aim C: Develop and Review a User Interface** Learners will use their plan to create an effective user interface. All choices made will be	**Controlled assessment Component 1** Learners need to ensure they have their notes book to help them with the CA. They are not allowed to use any other	**C2 Learning Aim A:** Learners will assess in comprehensive detail how data is used across two different sectors to make decisions. Their assessment will:	**C2 Learning Aim B:** Learners will select and use effectively relevant data manipulation methods. They will use data manipulation methods with accuracy

	What are the key facts, skills, and experiences that you want students to remember? What are the substantive and disciplinary concepts? Does the knowledge selected mean students leave with a good understanding? <u>Substantive – key facts</u> <u>Disciplinary- Methods of subjects</u> <u>Procedural- Skills</u>	principles. They will be critical in their assessment of each user interface and will assess the positive and negative effects that each design principle has on the user and their ability to positively interact with the device using detailed relevant examples. Learners will assess: • To what extent both user interfaces meet specific user needs and support users with different accessibility needs, skill levels and demographics • To what extent each user interface matches user perceptions and retains user attention • The suitability of the chosen type of user interface and explore alternatives • Their reasons as to why an alternative type of user interface would or would not better meet the user needs • How intuitive the user interface is and how it could be	provide a comprehensive range of project requirements, including all user requirements, input requirements, output requirements and user accessibility requirements. In their plan they will provide evidence of: • The use of suitable project planning tools to plan their timescales, including when tasks and sub-tasks will be completed • Key milestones, including when reviews will be completed with the user • Project constraints and potential risks that could affect the project and they will put together a comprehensive contingency plan, for example learners will show which tasks will be affected if other tasks are delayed • Which methodology they used to develop their plan and justify why it is the most appropriate. In their	appropriate to both the user requirements and the intended device. The user interface will show comprehensively: • All features, including the overall look and feel • How the user inputs data • How the interface responds and will output to the user • How the user navigates around the user interface. All user interactions will match user expectations. Learners will provide thorough relevant detail on how the user interface is appropriate for the intended device and the impact it will have on the user. All user requirements will have been met. Learners will obtain feedback from potential users and will refine their user interface using an iterative approach. All iterations will clearly improve the effectiveness and efficiency of the user interface. The changes made during each	material apart from their own notes. Learners will need to ensure they include information on the following: • Understand interface design for individuals and organisations • Use project planning techniques to plan and design a user interface • Develop and review a user interface All of this criteria will be covered in the lessons for LAA, LAB & LAC.	• Be specific in what data organisations need to make decisions and give a wide range of relevant examples to the context; each example will be comprehensively justified • Include comprehensive detail as to how both primary and secondary data collection methods affect the data (e.g. Sample size, who is asked). • There will be a range of relevant examples; each example will be comprehensively justified • Explore the link between the data collection methods and features, and how they impact on the quality of data throughout. **Aspects Learned** • Characteristics of data and information • Representing information • Ensuring data is suitable for processing	to manipulate a range of data. Learners will make efficient use of the data manipulation methods throughout their solution. This includes the use of complex functions (for example decision-making functions, string operation functions, lookup functions). The methods selected by learners will be comprehensively justified. Learners will provide a fully efficient and effective dashboard. This will: • Have a wide range of clear summaries of their manipulated data • Incorporate a wide range of appropriate presentation methods, including a range of different charts/graphics, tables, pivot tables and conditional formatting • Have presentation methods that are appropriate for the data being shown

		developed further to better meet the needs of users • The different techniques that have been used to allow the user to use the interface efficiently, using detailed examples. For example, learners may assess how the use of keyboard shortcuts and making buttons more distinguishable/bigger improves and reduces selection time.	design, they will provide evidence of the following: • A comprehensive initial design of their user interface for at least four screens. Their initial design will meet all user requirements, input and output requirements and user accessibility needs • A range of methods that show in thorough detail the visualisation of the user interface and comprehensive details of what hardware and software is required to create the user interface an effective test strategy, outlining what methods they will use to test their user interface.	iteration will be well documented. Learners will assess the strengths and weaknesses of their user interface. They will include assessment of: • How the user interface is easy to use and its suitability for the audience and purpose • How effectively they have made use of different design principles • How the user interface can be developed further to better meet both user requirements and design principles • The strengths and weaknesses of their project planning skills; this will include comprehensive detail on effective use of their chosen project planning tools and methodologies, and how relevant they were to the project • How they overcame project constraints		• Data collection • Quality of information • Sectors that use data modelling • Threats to individuals	• Use suitable presentation features to create an effective dashboard that clearly summarises data • Include suitable use of titles, labels, graphics, and a range of formatting features • Make use of automated features (e.g. Buttons/macros, dropdown menus) to show some different aspects of the data on their dashboard. For example, learners could have a dropdown menu to show data from a range of different areas of their dataset. **Aspects Learned** • Data processing methods • Producing a dashboard

				and the impact of using an iterative design approach.			
	What is the assessment intent and how will you assess? What types of assessments and question stems are being used to demonstrate students are learning and progressing to produce ever higher standards of work? What formative assessment is there for component learning and summative for composite learning?	Approved Assignment Brief Learning Aim A To assess progress against specified criteria of Learning Aim A of Component 1. Mark band 1-4 Total of 12 marks available	Approved Assignment Brief Learning Aim B To assess progress against specified criteria of Learning Aim B of Component 1 Mark band 1-4 Total of 12 marks available	Approved Assignment Brief Learning Aim C To assess progress against specified criteria of Learning Aim C of Component 1 Mark band 1-4 Total of 12 marks available	The assessment comes from the exam board and is split into 3 activities. Each activity covers each of the Learning Aims. Learners have 10 hours to complete the assessment. Each assessment has 4 mark bands. The total for each Learning Aim is 12 marks split in grade boundaries: Mark band 1 – (1-3) Mark band 2 – (4-6) Mark band 3 – (7-9) Mark band 4 – (10-12)	Approved Assignment Brief Learning Aim A To assess progress against specified criteria of Learning Aim A of Component 2. Mark band 1-4 Total of 12 marks available	Approved Assignment Brief Learning Aim B To assess progress against specified criteria of Learning Aim B of Component 2 Mark band 1-4 Total of 12 marks available
	What should the end point look like What is the impact of this component on the student's learning? What should the learning now look like via the	Learners will be able to assess how effectively two different types of user interface meet the design principles and user needs, with justified examples	Learners will be able to create an appropriate project plan for the design of a user interface that makes full and effective use of project planning techniques and create a comprehensive initial design that shows how it meets all user requirements.	Learners will be able to Use their plan to develop and refine an effective user interface that shows all features and assess the strengths and weaknesses of their user interface and project plan, justifying decisions made	Learners will be able to assess how effectively different types of user interface meet the design principles and user needs, with justified examples. Be able to create an appropriate project plan for the design of a user interface that makes full	Student will have completed Component 2 Learning Aim A internal assessment. Evidence word-processed document. Showing a comprehensive assessment of the data. Learners will have demonstrated knowledge of the following:	Student will have completed Component 2 Learning Aim B internal assessment. Evidence: A written document containing screenshots that: shows: ➢ The completed dashboard.

	assessment? Is disciplinary language used?				and effective use of project planning techniques and create a comprehensive initial design that shows how it meets all user requirements. Use their plan to develop and refine an effective user interface that shows all features and assess the strengths and weaknesses of their user interface and project plan, justifying decisions made	• Characteristics of data and information • Representing information • Ensuring data is suitable for processing • Data collection • Quality of information • Sectors that use data modelling • Threats to individuals	➢ The choice of presentation features used. ➢ The data manipulation tools used. Learners will have demonstrated knowledge of the following: • Data processing methods • Producing a dashboard
	Wider Curriculum Links Refer explicitly to the NC or KS4 Assessment Objectives.	The learning will link to current affairs – GREAT Lives, and the world outside of school. Numeracy and Literacy skills will be used as well as references to technological developments, historical events, and geographical areas. **Curriculum links to:** Maths English Science Graphics	The learning will link to current affairs – GREAT Lives, and the world outside of school. Numeracy and Literacy skills will be used as well as references to technological developments, historical events, and geographical areas. **Curriculum links to:** Maths English Science Graphics	The learning will link to current affairs – GREAT Lives, and the world outside of school. Numeracy and Literacy skills will be used as well as references to technological developments, historical events, and geographical areas. **Curriculum links to:** Maths English Science Graphics	The learning will link to current affairs – GREAT Lives, and the world outside of school. Numeracy and Literacy skills will be used as well as references to technological developments, historical events, and geographical areas. **Curriculum links to:** Maths English Science Graphics	The learning will link to current affairs – GREAT Lives, and the world outside of school. Numeracy and Literacy skills will be used as well as references to technological developments, historical events, and geographical areas. **Curriculum links to:** Maths English Science Graphics	The learning will link to current affairs – GREAT Lives, and the world outside of school. Numeracy and Literacy skills will be used as well as references to technological developments, historical events, and geographical areas. **Curriculum links to:** Maths English Science Graphics

Component 2 – LAC to be done 1st half term yr11

Component 2 – Assessment to be done in 2nd ½ term yr 11