KS4 - Year 10 – Digital - Curriculum Long Term Planning – 25-26

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 **Controlled assessment Component 2** Learners to work on a specific project allocated. **Component in brief** Learners will understand the characteristics of data and information and how they help organisations in decision making. They will use data manipulation methods to create a dashboard to present and draw conclusions from information.			**Component 3 AO1, AO2, AO3, AO4– Exam Unit** **AO1 Modern Technolgies** Demonstrate knowledge of facts, terms, processes, and issues in relation to digital information technology.
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 / B / C** **Complete Controlled Assessment within guidelines set by Pearson Edexcel.** ***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 2 learning Aim A** **Complete Controlled Assessment within guidelines set by Pearson Edexcel.** ***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)			**Component 3 is the last component of the Btec course and is the exam component.** Components 1&2 must be completed before component 3 Component 3 draws together concepts learned in components 1&2 along with new information from component 3. Learners will go through the SOL in order AO1, AO2, AO3, AO4.
What is the essential knowledge that	**C1. Learning Aim A:** Learners will carefully consider how effectively two different types of user interface meet a wide range of user interface design principles. They will be critical in		<u>Controlled assessment Component 2</u> Learners need to ensure they have their notes book to help them with the CA. They are not allowed to use any other material apart from their own notes.			**Learning Aim A: Modern technologies** Learners should learn about how current and modern technologies are used by and

	needs to be remembered? 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? Substantive – key facts Disciplinary- Methods of subjects Procedural- Skills	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 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. **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 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	**Learners will need to ensure they include information on the following:** **Task 1: Data collection methods** Learning outcome A: Understand how data is collected and used by organisations and its impact on individuals **Tasks 2a and 2b: Use data manipulation methods** Learning outcome A: Understand how data is collected and used by organisations and its impact on individuals Learning outcome B: Be able to create a dashboard using data manipulation tools **Task 2c: Create a dashboard** Learning outcome A: Understand how data is collected and used by organisations and its impact on individuals Learning outcome B: Be able to create a dashboard using data manipulation tools. **Task 3a: Effectiveness of the dashboard** Learning outcome A: Understand how data is collected and used by organisations and its impact on individuals Learning outcome C: Be able to draw conclusions and review data presentation methods **Task 3b: How presentation affects understanding** Learning outcome A: Understand how data is collected and used by organisations and its impact on individuals Learning outcome C: Be able to draw conclusions and review data presentation methods **Information learners will need to know:** • A1 Characteristics of data and information. • A2 Representing information. • A3 Ensuring data is suitable for processing. • A4 Data collection. • A5 Quality of information. • A6 Sectors that use data modelling. • A7 Threats to individuals. • B1 Data processing methods. • B2 Produce a dashboard. • C1 How to draw clusions based on findings in the data. • C2 How presentation of data affects understanding.	have an impact on organisations and their stakeholders. Learners need to know the ways in which organisations and associated individuals use modern technologies to exchange information, communicate, and complete work-related tasks. Learners must be able to apply their knowledge to a range of vocational contexts. Aspects to be learned: • Communication technologies • Cloud storage and computing • Cloud storage and traditional ICT compatibility • Modern technology and global aspects • Positive and negative impacts of technology on organisations and individuals. • Changes to Modern Teams

		• 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 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. **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 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 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 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 B & C To assess progress against specified criteria of Learning Aim A of Component 1. Mark band 1-4 Total of 12 marks available 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) There are 5 tasks to complete so this gives a total of 60 marks available	Approved Assignment Brief Learning Aim A B & C To assess progress against specified criteria of Learning Aim A of Component 2. Mark band 1-4 Total of 12 marks available 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) There are 5 tasks to complete so this gives a total of 60 marks available	Assessment takes place via Do Now and Plenary in class. Homework is given each week to check understanding. Each sub-unit of work has an assessment and students will do this once the sub unit of work is complete. Summative assessment takes place at the end of the unit of work This is to check understanding and not be part of the final grade for the assignment. Adapted and balanced examination-style questions to meet needs identified throughout and because of the Mock Examinations. Final Examination Mid-May 2022
	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**	Task 1: Data collection methods Learners will be able to identify the key aspects that make up data. They will be able to identify and explain the following: • A1 Characteristics of data and information. • A2 Representing information. • A3 Ensuring data is suitable for processing. • A4 Data collection. • A5 Quality of information. • A6 Sectors that use data modelling. • A7 Threats to individuals.	Learners will be able to identify the key aspects of how modern technology has impacted on society. They will be able to identify and explain: • Communication technologies • Cloud storage and computing • Cloud storage and traditional ICT compatibility • Modern technology and global aspects

	assessment? Is disciplinary language used?	**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 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	Learners will also need to explain how each aspect relates to a specific industry. **Tasks 2a and 2b: Use data manipulation methods** Learners will be able to create a spreadsheet from information that they have received and modify the spreadsheet so there is an output that meets the criteria. Learners will be able to use manipulation tools to modify their spreadsheet. Once the spreadsheet has been completed learners will then be able to create a dashboard. **Task 2c: Create a dashboard** Learners will be able to create a dashboard for themselves which encompasses each item from learning aim A. Once the dashboard has been created learners will be able to use tools to modify the dashboard so it's provides the correct information for the criteria. **Task 3a: Effectiveness of the dashboard & Task 3b: How presentation affects understanding** Learners will need to evaluate the dashboard they have created and link their knowledge to how the dashboard is fit for purpose. Learners will be able to identify and explain the main aspects of dashboard on the information that it provides. Learners will be able to explain how they created the dashboard and what the positives and negatives were in creating the dashboard. Learners will be able to explain the strengths and weaknesses of their dashboard.	• Positive and negative impacts of technology on organisations and individuals. • Changes to Modern Teams
	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