SJBC Curriculum Termly Plan: Y10 Design and Technology

Term	Topic(s) and links to other subjects	Core Knowledge	Core Vocabulary	Assessment	Resources
Autumn 1	Materials	Unit 3: Introduction to Materials • Papers and Board • Timbers • Polymers • Metals • Textiles	Papers Boards Softwoods Hardwoods Thermoforming Thermosetting Ferrous Non-ferrous Synthetic Natural	End of Unit assessment	CGP guide
Autumn 2	Practice NEA	**Design Movement Clocks** Students will perform research on design movements, *The Work of Others* and product analysis in order to gain inspiration to design their own clocks. The students will be introduced to a variety of manufacturing techniques available in the DT dept. This will enable students to problem solve in their final NEA which will begin in Summer 2. Theory Units which coincide with this project are: Unit 6: Designing Principles Unit 7: Making Principles	Research Concept design Iterative Design Isometric projection Manufacturing specification Quality control Tolerance Critical evaluation	Practical Assessment	2D design Laser cutter Practical workshop tools
Spring 1	Theory Unit 1 Unit 2	After completing a design and make task in the Autumn term, students will focus primarily on theory learning new content.	Automation Robotics Sustainability	**PPE1:** Unit 3 Unit 6	

		Unit 1: New and Emerging Technologies Unit 2: Energy Generation and Storage	Renewable Energy Market Pull Technology Push Crowdfunding Fair Trade	Unit 7	
Spring 2	Practice NEA: Theory Unit 4 Unit 5	Students will be manufacturing a materials experimentation toy cube. The product will be accompanied by a presentation of powerpoint slides used to research the properties, stock forms and uses of materials, adhesives, finishes and joinery techniques students will encounter in their final NEA (Summer 2).		Teacher Assessed Grades Graded PPT based on NEA tracker expectations	

SJBC Curriculum Termly Plan: Y11 Design and Technology

Term	Topic(s) and links to other subjects	Core Knowledge	Core Vocabulary	Assessment	Resources
Autumn 1	NEA	Students will be progressing into Section C with their NEA This involves designing their products. Students will use 3D modelling, CAD and drawing communication techniques to achieve this.	Isometric 3D modelling Prototyping Iteration	GCSE Tracker - TAG	Teams Guidance Template
	Theory	Revision sessions geared towards the November Mocks	All Unit 1-7	PPE	GCP Guide
Autumn 2	NEA	Students will be progressing into Section D with their NEA, developing their design ideas before they begin Section E, making. Students will use the skills they have developed throughout their DT school career to independently make their final design idea.	Computer Aided Design Computer Aided Manufacture Manufacturing Specification Quality Control	GCSE Tracker	Teams Guidance Template

			Quality Assurance MESS Analysis Lifecycle Assessment		
	Theory	Revision sessions geared toward the November mocks. Once mocks are completed, all DT lessons will focus on the NEA.		PPE	CGP Guide
Spring 1	NEA	Students will continue to make their GCSE NEA product and finish the NEA with Section F, Evaluation. Students will test their products and gain client feedback, to determine whether their product successfully meets the design brief and specification.	Prototype Iteration Feedback	GCSE Tracker	Teams Guidance Template
Spring 2	Theory	Revision sessions geared towards their GCSE written examination.			