## Newport Girls' High School



## Y7-11 Learning Overview

Subject: Design Techno

Design Technology Lead Teacher:

R Williams

Year:

7

Curriculum organisation

Students are taught in mixed groups of 23 for one hour per week. They are not grouped by ability.

	<u>How</u> will your child be learning?				
Term	Unit(s) of Work	Key Enquiry Questions	Key Content/ Terminology	Skills developed	• Whole class discussion
Autumn Term	Health and safety Manufacturing skills Baseline assessment of skills Technical drawing and design skills Graphic design project	<ul> <li>What are the differences between different drawing techniques and why are they used?</li> <li>How will you work through the design process and identify a client/ end user group?</li> <li>What primary/ secondary research is appropriate considering the context?</li> <li>How can we analyse the work of others?</li> <li>What role does imagery play in packaging and branding?</li> <li>How does packaging and branding influence consumer choices?</li> </ul>	<ul> <li>Health and Safety</li> <li>Safely in a workshop environment.</li> <li>Single point perspective</li> <li>Two point perspective</li> <li>Isometric</li> <li>Rendering</li> <li>Design Brief</li> <li>2d Development Nets</li> <li>Interlocking systems and close mechanisms.</li> <li>Purpose of Packaging</li> <li>Branding / Advertising</li> <li>Target Market</li> </ul>	<ul> <li>Key health and safety understanding</li> <li>Use of tools and equipment</li> <li>Presentation techniques and graphical communication</li> <li>Engineering drawing styles</li> <li>Research into existing products</li> </ul>	<ul> <li>Pair work</li> <li>Practical activities</li> <li>Problem-solving tasks</li> <li>Watching short video clips</li> <li>Research tasks</li> <li>Individual focus Practical Tasks and activities (building blocks)</li> <li>Investigation and Research activities.</li> <li>Demonstration activities</li> <li>Health and Safety discussions</li> <li>Use of whole school Rosenshine's principles of instruction-strategies for student autonomy with student led projects and design work, effective and meaningful feedback to increase progress.</li> </ul>
Spring Term	Graphic design project Materials and their properties Industrial production	<ul> <li>How can we present our designs to be informative and create interest?</li> <li>How can the principles of layout and composition enhance packaging and branding?</li> <li>What manufacturing processes are suitable to create a commercially viable product?</li> </ul>	<ul> <li>Design Brief</li> <li>Research Analysis</li> <li>Research and investigation</li> <li>Design Ideas</li> <li>Annotation techniques</li> <li>Modelling</li> </ul>	<ul> <li>Assessing quality within a practical</li> <li>Problem solving</li> <li>Understanding the user</li> <li>Presentation techniques and graphical communication</li> </ul>	
Summer Term	Manufacturing skills Food and nutrition	<ul> <li>What is quality and how can we assess that in our own work?</li> <li>What is tolerance?</li> <li>Why is Quality Control important?</li> <li>What is the Eatwell Guide?</li> <li>What are our nutritional needs and why are they important?</li> <li>Why is temperature control important?</li> <li>Why is temperature from?</li> </ul>	<ul> <li>Tools and processes</li> <li>Food Groups</li> <li>Nutrition</li> <li>Health and Safety in the kitchen</li> <li>Cross Contamination and Hygiene</li> <li>Food preparation, cooking and handling Skills</li> </ul>	<ul> <li>Key practical skills and health and safety knowledge</li> <li>Evaluating key food groups and their benefits</li> <li>Analysing macronutrients and micronutrients</li> <li>Recognising key health and safety considerations when preparing food.</li> </ul>	

Equipment needed for lessons	How will learning and progress be assessed?	
<ul> <li>Standard school stationery</li> <li>Exercise book</li> <li>Calculator?</li> <li>Coloured pencils</li> </ul>	<ul> <li>End of unit tests (subject knowledge focus)</li> <li>Formal assessment week (May)</li> <li>Peer and self assessment</li> <li>Homework tasks (often research or project based)</li> <li>Retrieval practice activities</li> <li>Baseline assessment 1st 2 weeks in September</li> <li>Final outcomes assessment with targets for development.</li> </ul>	

Extension & Enrichment opportunities	What can you do to support your child?
<ul> <li>In-class extension tasks that are appropriate to activity and thought provoking for early finishers that progress more quickly than peers.</li> <li>Coaching opportunities during lesson. These often lead to ambassadors for the subject in later years.</li> </ul>	• Support with practical homework activities and organisation.
Inclusion	Inclusion within Design Technology
<ul> <li>Teachers follow student passports to ensure that the needs of all students with SEND are met.</li> <li>Work is enlarged to the necessary size for visually impaired students.</li> <li>Teachers will ensure that classrooms are quiet learning environments where possible and will dim lights to support students with sensory needs.</li> <li>Students have the use of laptop if they have a SEND need whereby use of a laptop supports them.</li> <li>Hearing impaired students are supported through use a radio aid and teachers ensure that students can lip read at all times during lessons.</li> <li>Dyslexic students are encouraged to use coloured overlays when they are required to read long passages.</li> <li>Use of dyslexic friendly fonts and coloured backgrounds used in PowerPoints/resources.</li> <li>Students with ADHD are given movement breaks, fidget toys and lessons are 'chunked' to aid concentration.</li> <li>Students work with the SENDCo to decide upon this.</li> </ul>	<ul> <li>Within projects students learn about a range of designers with a full range of backgrounds.</li> <li>Students are supported practically by the teacher or TA if a student requires this.</li> <li>Equipment I adapted where necessary to accommodate the needs of the students with SEND.</li> <li>Where necessary students are given frequent one to one tutorials and demonstrations to revisit previous techniques and processes taught to support their understanding.</li> <li>Students are encouraged during designing to think about their own experiences and how these interact with the material/ project they encounter.</li> <li>Dyslexic students are provided with knowledge organisers for each topic in order to have reference to key terminology and definitions.</li> <li>Use of visual and audio cues to support processing of written text.</li> <li>Keywords/ subject specific vocabulary displayed on walls to aid memory.</li> <li>All teachers employ inclusive pedagogy so not just what they teach but how they teach is inclusive through a variety of delivery techniques (step-by step guides, mind-maps, multiple choice questions, placemats/ written task instructions) and assessment design which contributes to the achievement of all pupils (use of model examples, scaffolder responses)</li> </ul>

If you have any questions about this Learning Overview, please contact the named Teacher above.