**Design & Technology Long Term Plan-KS4**

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| **The Westleigh School****https://westleighhigh.co.uk/images/logo/5.png** | **Term 1** |  | **Term 2** |  | **Term 3** |  |
| **YR 9****BTEC Construction****(TMC)** | **Topic description:**Exploring Carpentry and Joinery-Unit 6 Working with a range of timber-Hardwoods/Softwoods/Man-made timbers- Properties of materials- Cost-material sources and sustainability.Design Brief- Identified problem- Students to manufacture a suitable lighting product using a range of timber and traditional woodworking techniques.(Traditional wood-working Joints)**Subject Key piece-:**Functional Timber based light design manufactured using carpentry and joinery techniques.**Literacy focus- Oracy:**Students to develop key subject specific terminologyTraditional wood-working jointsMaterial types Hardwoods/softwoods and man-made timbersFabrication terminologyProperties and material characteristics.  | **Assessment- DC1**Design Problem? Developing a practical solution- Fabrication-tools and equipment**Literacy focus- Oracy**Existing product researchAnd analysisACCESSFM- Key criteria acronymProduct Evaluation 3rd Party feedbackPeer assessment and product review | **Topic description-**Carpentry skills- Traditional woodworking frame construction manufacture- Carpentry Unit preparation for practical assessment**Subject Key piece-** Multiple traditional woodwork joints fabrication.Knowledge and understanding fabrication functionality and purpose* Mortise &Tenon
* Half Lap Joint
* Dowel Joint
* Comb Finger Joint
* Dovetail Joint
* Biscuit Joint
* Rebate Joint

Manufacture frame construction using a variety of woodworking joints- Controlled set task- **Literacy focus- Oracy**Key discuss/debates to reinforce knowledge and understanding of carpentry/traditional wood-working methods and practical fabrication processes | **Topic description-**Unit 2 Construction in DesignStudents to develop their knowledge of the construction industry reviewing key roles and responsibility within the industry.Roles within the industry review- Students to research the range of roles within the e practical construction industry reviewing responsibility, qualifications,salaryand job proposals.Students will be given a set Design Brief (Low rise domestic building manufacture-5.2M- Students will complete a range of research developing a suitable design proposal meeting the client needs**Assessment- DC2**Engineer Drawings design Task- Low rise domestic building**Subject Key piece-** Scale model production-evaluation&report client needs**Literacy focus- Oracy**Key subject specific language.* Green Spaces
* Aesthetic appearance
* Sustainability
* Design for functionality
* Designing for occupancy
* Security
* The built environment
 | **Topic description-**Unit 1 Building Construction performance requirements* Structural performance
* Sub Structures
* Construction methods

**Subject Key piece-** Performance requirements for sub structures review assessment**Literacy focus- Oracy**Key subject language associated with A.1,A,2,B.1,B.2,C.1,C.2,C.3* Strength
* Stability
* Fire Resistance
* Sound Insulation
* Weather Resistance
* Sustainability
* Self Weight
* Cavity Walls
* Concrete
* Lateral and Vertical restraint
 | **Assessment- DC3**Sub structure analysis and review- ( Set structure)**Subject Key piece-** Performance requirementsCommon structural formsPre-Construction workSub Construction GroundworkSuper structure wallsSuper structure floorsSuper structure roofing**Literacy focus- Oracy**Key subject Terminology associated with Unit 1 to support students knowledge of new language associated within the construction industry  |
|  | **HT1****(Week1-7)** | **HT2****(Week8-15)** | **HT3****(Week16-21)** | **HT4****(Week22-27)** | **HT5****(Week28-32)** | **HT6****(Week33-39)** |
| **YR 9****Hospitality& Catering****L1/2 (ACR)** | **Topic description:**Key skills in cooking and The environment in which H&C operates**Subject Key piece:**Mid-term theory test reviewing skills, knowledge and understanding of key topics.Controlled practical task-Set time frame**Literacy focus:**Writing/reading –*Research on industry standards*Oracy– *group and teamwork discussions during practical and oral feedback.*Written –*Class notes of theory and the test*. | **Topic description:**Key skills in cooking and The environment in which H&C operates**Subject Key piece:**End of term test and Balti practical.**Literacy focus-** **Writing/reading** –*Research on industry standards***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory and the test.* | **Topic description:**Development of skills in cooking and how the H&C provisions operate**Subject Key piece:**Mid-term test and various practical’s**Literacy focus-** **Writing/reading** –*Research and understanding of key industry documentation***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory and the test. Ongoing evaluation of dishes.* | **Topic description:**Development of skills in cooking and how the H&C provisions operate**Subject Key piece:**End of term test and chosen starter/dessert practical.**Literacy focus-** **Writing/reading** –*Research and understanding of key industry documentation***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory and the test. Ongoing evaluation of dishes.* | **Topic description:**Development of skills in cooking and how foods can cause ill health**Subject Key piece:**Mid-term test and chosen Main practical.**Literacy focus-** **Writing/reading** –*Research and understanding of key types of food poisoning.***Oracy**– *Group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory and the test. Ongoing evaluation of dishes and self-reflection* | Topic description**Development of skills in cooking and how foods can cause ill health**Subject Key piece**Mid-term test and chosen Main practical.****Literacy focus-** **Writing/reading** –*Research and understanding of key types of food poisoning/Bacteria***Oracy**– *Group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory and the test. Ongoing evaluation of dishes and self-reflection* |
| **YR 9 BTEC****Home cooking Skills****L1/2 (SM)** | **Topic description-**Home cooking skills. Breakfast and its valuesPractical cooking skills.Understanding of good hygiene,**Subject Key piece-** Pupils will gain an understanding of the assessment criteria and expectations of them after practical’s. They will gain the knowledge and understanding of hygienic working.Students will develop the skill and knowledge of boiling frying and scrambling eggs along with comparing its taste nutritional value and visual appeal.Pupils will understand the importance of breakfasts and its nutritional values They will gain cooking skills in producing a range of breakfasts including bacon sandwich to porridge.**Literacy focus- Oracy**Key vocabulary linked to subject.Peer and teacher led discussions using professional language to peer evaluate others work.**Assessment-** **DC1** Production of a recipe without support based on previous skill and knowledge. Then evaluate / analyse and produce a written report to exam specification (2Hrs). | **Topic description-**Home cooking skills Bread, Soups, sauces and Pasta.**Subject Key piece-** Pupils will gain skill and knowledge of Bread making techniques and alternative types of bread,Understand how to make fresh soups using a range of current seasonal vegetables. Pupils will also understand how to develop sauces and how they can be used with different types of pasta,Pupils will gain skill in the use of knives. **Literacy focus- Oracy**Key vocabulary linked to subject.Peer and teacher led discussions using professional language to peer evaluate others work.**Assessment-** Developing techniques from the previous exam pupils willProduce a recipe without support based on previous skill and knowledge. Then evaluate / analyseand produce a written report to exam specification (2Hrs). | **Topic description-**Developing cooking skills when following a recipeDemonstrate food safety and hygiene throughout the preparation and cooking processDevelop food habits eg prepare and eat home cooked food; benefits to long term wellbeing of self and family**Subject Key piece-** Basic mince cookery – Meat dishes/alternative for specific dietry requirements. Meatballs, chilli with lentils, Bolognese sauce and spaghetti (skills – chopping, mixing, shaping, simmering, boiling, using griddle)Literacy focus- OracyKey cooking terminologyFryingBakeGlazeSteam Simmer SiftSterilizeHygieneSteep-Flavour ExtractionShred Sheer Score**Assessment- DC2**Develop a meat Qourn dish recipe/alternative follow set skill sets and cooking methods-Timed Activity (2HRS) | **Topic description-**Deserts- Healthy optionFood & Nutrution**Subject Key piece-** Students to develop the importance of food and nutrition. Identify healthy natural sugars and understand the importance of a healthy balanced diet-Well being* Student to combine a range of natural healthy ingredients to develop healthy desert options

**Dishes-**Low sugar rhubarb crumbleFresh fruit salad cobblerSummer berry fruit saladLiteracy focus- Oracy**Assessment-** Students to produce a healthy desert option following a set brief-C/A Timed activity | **Topic description-**Specific dietry requiremnts Designing lunch set meal packed lunch- Dietry needs**Subject Key piece-** Creating a healthy well balanced meal for specific consumer needs.* Infant Child
* Teenager
* Elderly
* Dietry needs
* Specific dietry requirments allergies

**Literacy focus- Oracy****Key terminology*** Diet requirements
* Allergies
* Nutrients
* Eat well plate
* Consumer requirements
* Health and safety
* Liability

**Assessment-** Dessign and produce a packed lunch following specific consumer requiremnts- Healthy balanced, nutritional option.Practical task | **Topic description-**Menu production 2 Course meal-Starter-MainMain-DessertStudents utilse the knowledge and understanding of the range of dishes and skills complete to produce a 2 course menu. All dishes must showcase a range of practical skills and be presented to restaeraunt standar**Subject Key piece-** **2 course meal Production****Literacy focus- Oracy****Assessment-** Written assessment .Kitchen health and hygieneUtensils and production methodsPractical safety and legislation |
| **YEAR 10****OCR Engineering Design****(TMC/ACR)** | Topic description**Unit R107 and R105**Subject Key piece**Designs and annotation**Assessment**LO1, LO2 and mid-term test**Literacy focus**Oracy**-Group discussions**Writing**- Annotation of designs | Topic description**Unit R107 and R105**Subject Key piece**Final designs, annotation and modelling**Assessment**DC1, LO1, LO2 & LO4 and end of term test**Literacy focus**Oracy**- Group discussions**Writing**- Note taking and exam starters **Reading**-Revision and use of revision guides | Topic description**Unit R107 and R105**Subject Key piece **Mid-term test and Google Sketch-up with annotation**Assessment**LO1, LO2& LO4 and mock exam**Literacy focus **Oracy**- Group discussions**Writing**- Note taking and exam starters **Reading**-Revision and use of revision guides | Topic description**Unit R107 and R105**Subject Key piece**Final design and engineering drawing** Assessment**DC2 and LO1, LO2, LO3 & LO4. End of term test**Literacy focus **Oracy**- Group discussions**Writing**- Note taking and exam starters **Reading**-Revision and use of revision guides | Topic description**Unit R108 and R105**Subject Key piece**Production plan and health and safety**Assessment**LO1 &LO2 and mid-term test**Literacy focus **Oracy**- Group discussions**Writing**- Note taking and exam starters **Reading**-Revision and use of revision guides**.** CLEAAPS forms | Topic description**Unit R108 and R105**Subject Key piece**Manufacture of final piece**Assessment**LO2 & LO3 and mid-term test. Final exam**Literacy focus **Oracy**- Group discussions**Writing**- Note taking and exam starters **Reading**-Revision and use of revision guides |
| **Yr 10****Hospitality and Catering EDUQAS****(SM/ACR)** | **Topic description:**Development of cooking skills and how the H&C provisions operate**Subject Key piece:**AC2.1 & AC2.2 producing a range of practical dishes developing skill base**Assessment:**Baseline assessment and mid-term test.**Literacy focus-** **Writing/reading** –*Research and understanding of key industry documentation***Oracy**– *Group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory preparation for exam. Ongoing evaluation of dishes.***HT1****(Week1-7)** | **Topic description:**Development of cooking skills, how the H&C provisions operate and how the H&C provision meets H&S requirements**Subject Key piece**LO2-AC2.2 & AC2.3 LO3-AC3.1 & AC3.2Balti practical.**Assessment:**DC1. End of term test and Curry dish practical assessment**Literacy focus-** **Writing/reading** –*Research and understanding of key industry documentation***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory and the test. Ongoing evaluation of dishes.***HT2****(Week8-15)** | **Topic description:**Development of cooking skills and how the H&C provision meets H&S requirements**Subject Key piece:**LO3-AC3.2 & AC3.3 and various practical’s**Assessment:**DC1. Mock exam and various practical’s**Literacy focus-** **Writing/reading** –*Research and understanding of key industry documentation***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***Class notes of theory and the test. Ongoing evaluation of dishes.***HT3****(Week16-21)** | **Topic description:**Development of cooking skills and exam theory**Subject Key piece:**LO1, LO2, LO3 & LO4 and practical’s.**Assessment:****End of term test and chosen starter/dessert practical.****Literacy focus:****Writing/reading** –*Reading of revision material. How understand exam questions***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***How to answer exam questions. Ongoing evaluation of dishes..***HT4****(Week22-27)** | **Topic description:**Development of cooking skills and exam revision**Subject Key piece:**LO1, LO2, LO3 & LO4 and practical’s.**Assessment:**Mock exam and chosen Main practical.**Literacy focus:** **Writing/reading** –*Reading of revision material. How understand exam questions***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***How to answer exam questions. Ongoing evaluation of dishes.***HT5****(Week28-32)** | **Topic description:**Development of cooking skills and exam revision**Subject Key piece:**LO1, LO2, LO3 & LO4 and practical’s.Start LO5**Assessment:**DC3 and final exam.A starter/ dessert and a main dish.**Literacy focus:** **Writing/reading** –*Reading of revision material. How understand exam questions***Oracy**– *group and teamwork discussions during practical and oral feedback.***Written –***How to answer exam questions. Ongoing evaluation of dishes.***HT6****(Week33-39)** |
| **YEAR 11****OCR Engineering****(ACR)** | Topic description**Unit R107****Subject Key piece:**Final designs, annotation and modellingAssessment**LO1 & LO2**Literacy focus**Oracy**-Group discussions**Writing**- Annotation of all designs following set criteria. | Topic description**Unit R107& R108****Subject Key piece:**Computer Aided Design modelling and development Google Sketch-up. Students to explain and annotate designs following set criteria ACCESSFM.Complete scale accurate Engineering drawings of final [product solutionAssessment**DC1 and LO1, LO2, LO3 & LO4.** Literacy focus**Oracy**-Group discussions**Writing**- Annotation of designs | Topic description**Unit R108**Subject Key pieceProduction plan and health and safety. Start manufacture/fabrication of final product using a range of processes combing hand tool skills and CAD/CAMAssessment**LO1, LO2& LO3**Literacy focus:Key subject specific vocabulary | Topic description**Unit R108 & R106****Subject Key piece:**Manufacture of final product and evaluation. Research of industry.Assessment**DC2****R108-LO3 & LO4****R106-LO1** Literacy focus**Reading**-Internet searches and technical engineering books.**Oracy**-Group discussions**Writing**-Manufacture diary and evaluations | Topic description**Unit R108 & R106****Subject Key piece:**Disassembly and comparisons.Assessment**R106-LO2, LO3 & LO4**Literacy focus**Reading**-Internet searches, instructional manuals and technical books.**Oracy**-Group discussions on testing/Fabrication/Manufacturing processes**Writing**-Product analysis | **Literacy focus:** **Writing/reading** –*Reading of revision material. How understand exam questions***Oracy**– *group and teamwork discussions during practical and oral feedback.* |
| **YR11 NCFE Graphics****(SM)** | **Topic description-** Unit 3 working to a design Brief**Subject Key piece-** Pupils will gain skill and knowledge of analysing briefs taking in to account the client’s requirements.Produce and develop ideas in response to briefs.Pupils will develop their technical skills to produce a high level product by hand or digitally.**Assessment-** Pupils will be assessed against the NCFE VCERT Criteria for that unit.Analysis of the brief that demonstrates their understanding of what is required.**Literacy focus- Oracy**Key vocabulary linked to subject.In depth knowledge of graphic components.Peer and teacher led discussions using professional language to peer evaluate others work. | **Topic description-**Unit 3 working to a design Brief**Subject Key piece-** Pupils will show skill and an understanding of how they can use resources effectively and how the designs they have produced match the design criteria. Pupils will also develop analytical skills by understanding their strengths and weaknesses.**Assessment-** Pupils will be assessed against the NCFE VCERT Criteria for that unit.Developed a final idea that matches the requirements of the brief exactly. The application of technical skills to a high level.Pupils can evaluate their own work in terms of strengths and weakness along with their technical skills evaluation.**Literacy focus- Oracy**Key vocabulary linked to subject.In depth knowledge of graphic components.Peer and teacher led discussions using professional language to peer evaluate others work. | **Topic description-**Unit 4 Graphic design portfolio**Subject Key piece-** Pupils will have a knowledge of types of work in the graphic design industry. Have an understanding of different presentation methods and how they can link to the jobs.Gain skill and knowledge of how to create a portfolio that presents their best work in a physical format.**Assessment-** Pupils will be assessed against the NCFE VCERT Criteria for that unit.Pupils can describe entry routes in to the graphics industry.Production of a portfolio showing their technical skills.**Literacy focus- Oracy**Key vocabulary linked to subject.In depth knowledge of graphic components.Peer and teacher led discussions using professional language to peer evaluate others work. | **Topic description-**Unit 4 Graphic design portfolio**Subject Key piece-** Pupils will develop their understanding of evaluation skills and gain knowledge of how to implement this in to a written report.Pupils will be able to recognise their strengths and weaknesses in the subject area and suggest how to improve in each area.**Assessment-** Pupils will be assessed against the NCFE VCERT Criteria for that unit.**Literacy focus- Oracy**Key vocabulary linked to subject.In depth knowledge of graphic components.Peer and teacher led discussions using professional language to peer evaluate others work. | **Topic description-**Revision skills**Subject Key piece-** Revision A range of knowledge recall sessions.Study skills techniquesPast examination papers UNIT 3 recall and links to exam.**Assessment-** Pupils will be assessed against the NCFE VCERT Criteria for that unit.Final Exam set by the board**Literacy focus- Oracy**Key vocabulary linked to subject.In depth knowledge of graphic components.Peer and teacher led discussions using professional language to peer evaluate others work. | **Topic description- N/A**Revision skills- Preparation and exam technique**Assessment-** Literacy focus- Oracy-Review of key subject specific languageExam strategy and techniqueExam question breakdown extracting key information from the question |
| **YR 11 Hospitality & Catering** | Topic description-Assessment-  | Topic description-Assessment-  | Topic description-Assessment-  | Topic description-Assessment-  | Topic description-Assessment-  | Topic description-Assessment-  |