Course Outline Year 8 2017

Course Description	Within the framework of the course, students will aim to develop the knowledge, understandings and skills to ensure they, individually and collaboratively, investigate, design, plan, manage, create and evaluate solutions.	Two Main Projects	
		Trebuchet.	Skills Projects
Learning Outcomes	• Understands and implements safe working habits and procedures • Demonstrates understanding of technical terminology • Successfully implements the design process • Evaluates own work against set criteria • Follows directions to complete projects • Demonstrates skills in the use of equipment • Investigate how digital systems function • Design and create digital solutions to solve real world problems	The Trebuchet was a weapon used during siege warfare. The Medieval Trebuchet was similar to a catapult, or stave sling, which was used for hurling heavy stones to smash castle or city walls. The brief is to research, design and construct a Trebuchet. The brief outlines the materials they may use in the construction and the overarching rule that the finished product will fit into an	To teach the students the basic hand skills to operate hand and power tools safely in the workshop
Work Practice Outcomes	• Works independently • Works cooperatively • Completes all set tasks		

		800mm square when loaded.			
Assessment Items	• Class work • Tests • Portfolio of class work	**Projects**			
Place of Learning	WAGIN DISTRICT HIGH SCHOOL	Semester 1			
		Trebuchet.	Portfolio	Wood Turning (Bowl)	Spice Rack or Desk Tidy
Knowledge and understanding Year 8		**Links to the Curriculum**			
Technologies and society	Social, ethical and sustainability considerations, in the development of technologies and designed solutions, to meet community needs for economic, environmental and social sustainability Development of products, services and environments through the creativity, innovation and enterprise of individuals and groups	**X**	**X**	**X**	**X**
Technologies contexts	In Year 8, students will have opportunities to create designed solutions in at least one of the technologies contexts below	**X**	**X**	**X**	**X**
Engineering principles and systems	The design of simple solutions using motion, force and energy, to manipulate and control electromechanical and mechanical systems	**X**	**X**	**X**	
Materials and technologies specialisation	The process for the selection and combination of materials, systems, components, tools and equipment	**X**	**X**	**X**	**X**

Processes and production skills					
Investigating and defining	Investigate a given need or opportunity for a specific purpose Evaluate and apply a given brief Consider components/resources to develop solutions, identifying constraints	X	X	X	X
Designing	Design, develop, evaluate and communicate alternative solutions, using appropriate technical terms and technology Produce a simple plan designed to solve a problem, using a sequence of steps	X	X	X	X
Producing and implementing	Safely apply appropriate techniques to make solutions using a range of components and equipment	X	X	X	X
Evaluating	Develop contextual criteria independently to assess design processes and solutions	X	X	X	X
Collaborating and managing	Work independently, and collaboratively when required, to plan, develop and communicate ideas and information when managing projects	X	X	X	X