

UCC - Year 10 Scheme of Learning: Resistant Materials

This programme of study is constantly updated, this is the most recent version.

Autumn	Project 1	Design and make a Block Bot desk buddy
	Project Content	Orthographic and exploded drawings. Processes: drilling and use of routers, shaping wood and finishing techniques. Joining wood using screws and dowels. Wood joints theory focus. Designer: Alessi
	Theory	Materials, their properties and end uses Unit 1 – New and emerging technologies Section 2 Sustainability and the environment. Unit 1 – New and emerging technologies Section 5 – Informing design decisions. Unit 1 – New and emerging technologies Section 3 – People, culture and society
Spring	Project 2	Design and make a clock using CAD/CAM
	Project Content	Designer: Ettore Sottsass. Memphis Use of 2D design - CAD. Use of laser cutter CAM Understanding of polymers - Acrylic Orthographic drawings The work of others
	Theory	Modern materials Smart Materials Composites and technical textiles
Summer	Project 3	Design and make a footstool/table
	Topic	User centred design Collecting and using research Joining and finishing wood Joints – Mortice and tenon and dowel Isometric drawing Orthographic drawing