Oxford Scholastica ACADEMY

Discover Technology Course Outline

Class	Class Content and Lesson Objectives
1	**Introduction to the course** *Students will be able to:* • Get to know each other and understand what to expect from the course curriculum • Set norms and values for the course • Understand their overall task for the course **Discover Rockets** *Students will be able to:* • Explore what a rocket is and the concepts required to design and build simple and complex rockets
2	**Electronic Systems** *Students will be able to:* • Introduce series and parallel circuits • Explore electricity, including looking at how to calculate voltage, resistance and current
3	**Photonics** *Students will be able to:* • Explore photonics – the science of generating and harnessing light – and how photonic systems work
4	**Maths for Engineering and Computing** *Students will be able to:* • Investigate equations required to understand basic computing functions
5	**Introduction to HTML** *Students will be able to:* • Outline the key features of HTML, a language used to create web pages • Examine some example of HTML • Work through exercises to build skill and confidence in HTML
6	**Introduction to CSS** *Students will be able to:* • Outline the key features of CSS, a language that styles and designs web pages • Discuss its differences to HTML and applications to websites • Work through exercises to build skill and confidence
7	**Website Building** *Students will be able to:* • Use the skills they've learnt to build a website • Incorporate the use of HTML and CSS • Iterate their website based on peer and tutor feedback

8	**Technology of the Future** *Students will be able to:* ● Learn about the future direction of technological innovations, including AI ● Articulate their own views on the future of technology, including the risks and opportunities of new tech ● Explore individual designs for futuristic products for both commercial and personal use
X	**Class X:** The final class is based on the tutor's personal expertise in the field, focusing on cutting-edge research that they're passionate about.
	CHALLENGE: Students will be given the chance to put their skills to the test during a Rocket Challenge. They will: ● Work on the design of a new rocket, using materials provided ● Collaborate with team members to design the perfect rocket ● Launch their rocket and see which rocket goes the highest

Please note, this course outline may be subject to change