The Ridgeway School & Sixth Form College

…Inspiring Learners For Their Future

*'Our shared vision is that our students, colleagues and families will be part of a **FAIR** community.*

*We will support our school **Family** to **Achieve** their potential, and **Inspire** students to **Reach** the very best destinations.'*

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Biology

Curriculum Overview

RESPECT | HONESTY | ENDEAVOUR | CREATIVITY | COMMUNITY

Year 7 Science Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	• Biology- Living things 1 • Chemistry- Particles 1	• Biology-Living things 1 • Chemistry- Particles 1	• Chemistry- Properties and reactions 1 • Physics-Energy and Waves 1	• Chemistry- Properties and reactions 1 • Physics- Energy and Waves 1	• Biology-Our Environment 1 • Physics-Forces and Electricity 1	• Biology-Our Environment 1 • Physics-Forces and Electricity 1

Year 8 Science Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 8	• Biology- Living things 2 • Chemistry- Particles 2	• Biology-Living things 2 • Chemistry- Particles 2	• Biology- Our Environment 2 • Physics-Energy and Waves 2	• Biology- Our Environment 2 • Physics-Energy and Waves 2	• Chemistry- Properties and reactions 2 • Physics-Forces and Electricity 2	• Chemistry-2 • Physics-Forces and Electricity 2

Year 9 Science Curriculum Overview-

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 9	• Biology- Living things 3 • Chemistry- 3	• Biology- Living things 3 • Chemistry- 3	• Biology- Our Environment 3 • Physics-Energy and Waves 3	• Biology- Our Environment 3 • Physics-Energy and Waves 3	• Chemistry-3 • Physics-Forces and Electricity 3	• Chemistry-2 • Physics-Forces and Electricity 3

Year 10 Biology Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 10	B1- Cell Structure and Transport B2- Cell Division B3- Organisation and the Digestive System	B3- Organisation and the Digestive System B4- Organising Animals and Plants	B5- Communicable Diseases B6-Preventing and Treating Diseases	B6- Preventing and Treating Diseases B7- Non-Communicable Diseases B8- Photosynthesis	B8- Photosynthesis B9- Respiration	B10- The Human Nervous System

Year 11 Biology Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 11 Combined Science	B11- Hormonal Coordination B13- Reproduction	B13- Reproduction B14- Variation and Evolution	B15- Genetics and Evolution B17- Organising an Ecosystem B18- Biodiversity and ecosystems	B18- Biodiversity and Ecosystems B16- Adaptations, Independence and Competition	Revision	
Year 11 Triple Science	B10- The Human Nervous System B11- Hormonal Coordination	B12- Homeostasis in Action B13- Reproduction B14- Variation and Evolution	B14- Variation and Evolution B15- Genetics and Evolution B17- Organising an Ecosystem	B16- Adaptations, Independence and Competition B18- Biodiversity and Ecosystems	Revision	

Sixth Form Curriculum Overview

Biology

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	2.1- Cell Structure 2.2- Biological Molecules 2.5- Biological Membranes	2.3- Nucleic Acids 2.4- Enzymes 2.6- Cell division, diversity and differentiation	3.1- Exchange surfaces 3.2- Transport in animals 4.1- Communicable diseases 3.3- Transport in plants	3.3 – Transport in plants 4.3- Classification and evolution 4.2- Biodiversity 6.5- Ecosystems	6.6- Population and sustainability 4.2- Biodiversity	5.1- Communication and Homeostasis 6.5- Ecosystems
Year 13	**Term 1**	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6**
	5.2- Excretion as an example of homeostatic control 5.3 Neuronal communication 5.4- Hormonal communication 5.5- Plant and animal responses	5.6-Photosynthesis 5.7- Respiration 6.1-Cellular Control 6.2 Patterns of inheritance	6.2 Patterns of inheritance 6.3 Manipulating Genomes 6.4- Cloning and biotechnology	6.6- Populations and sustainability 6.4- Cloning and Biotechnology	Revision	

Applied Science Curriculum Overview

Extended Certificate

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	Unit 1: Principles and Applications of Science I • Biology • Chemistry • Physics	Unit 1: Principles and Applications of Science I • Biology • Chemistry • Physics	Unit 2: Practical Scientific Procedures and Techniques • Chromatography • Titrations *Unit 1 exams to take place in January*	Unit 2: Practical Scientific Procedures and Techniques • Chromatography • Titrations	Unit 2: Practical Scientific Procedures and Techniques • Calorimetry • Personal review	Unit 3: Science Investigative Skills • Plants • Electricity
Year 13	**Term 1**	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6**
	Unit 3: Science Investigative Skills • Fuels • Diffusion	Unit 3: Science Investigative Skills • Enzymes • Electricity	Unit 9: Human Regulation and reproduction *Unit 3 exam takes place in January*	Unit 9: Human Regulation and reproduction	Unit 9: Human Regulation and reproduction	Unit 9: Human Regulation and reproduction

National Diploma

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	Unit 8: Physiology of Human Body Systems	Unit 8: Physiology of Human Body Systems	Unit 5: Principles and Applications of Science II	Unit 5: Principles and Applications of Science II	Unit 5: Principles and Applications of Science II *Unit 5 exams to take place in May*	Unit 4: Laboratory Techniques and their Application
Year 13	**Term 1**	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6**
	Unit 4: Laboratory Techniques and their Application	Unit 4: Laboratory Techniques and their Application	Unit 6: Investigative Project	Unit 6: Investigative Project	Unit 6: Investigative Project	Unit 6: Investigative Project