




# Biology

Year 11 at Walford

*Her Way*

You will develop your understanding about the diversity of life as it has evolved, the structure and function of living things, and how they interact with their own and other species and their environments. You will apply your understanding of the interconnectedness of biological systems to evaluate the impact of human activity on the natural world. You will also inquire into and explain biological phenomena and draw evidence-based conclusions from your investigations into biology-related issues, developments, and innovations. You will study cells and microorganisms, infectious disease, multicellular organisms and biodiversity and ecosystem dynamics.

**Stage 1 Elective**  
**One or two**  
**semesters**

 <b>Engage</b> <i>Skills</i>	 <b>Extend</b> <i>Knowledge</i>	 <b>Enrich</b> <i>Experiences</i>
<ul style="list-style-type: none"> <li>• Apply science inquiry skills to deconstruct a problem and design and conduct biological investigations, using appropriate procedures and safe, ethical working practices</li> <li>• Obtain, record, represent, analyse, and interpret the results of experimental investigations</li> <li>• Evaluate procedures and results, and analyse evidence to formulate and justify conclusions</li> <li>• Develop and apply knowledge and understanding of biological concepts in new and familiar contexts</li> <li>• Explore and understand the interaction between science and society</li> <li>• Communicate knowledge and understanding of biological concepts, using appropriate terms, conventions, and representations.</li> </ul>	<ul style="list-style-type: none"> <li>• Cells and microorganisms</li> <li>• Infectious disease</li> <li>• Multicellular organisms</li> <li>• Biodiversity and ecosystem dynamics</li> </ul>	<ul style="list-style-type: none"> <li>• Uni SA STEM opportunities - STEM Girls on Campus – others as they arise via STEM Girls Academy</li> <li>• Science Olympiads (optional)</li> <li>• Oliphant Awards (optional)</li> <li>• National Youth Science Forum (optional)</li> <li>• STEM Tour (optional – offered every two years)</li> </ul>

 <b>Assessments/Outcomes</b>	 <b>Pathways</b>
<p>Each semester - one practical investigation, one investigation with a focus on science as a human endeavour, two skills and applications tasks.</p>	<p><b>Career Pathways:</b> Doctor, Nurse, Midwife, Dentist, Veterinarian, Audiologist, Nutritionist, Dietician, Chiropractor, Physiotherapist, Geneticist, Occupational Therapist, Optometrist, Paramedic, Pharmacist, Podiatrist, Speech Pathologist, Oncologist, Sports Scientist, Agriculturalist, Aquaculturalist, Fisheries Scientist, Horticulturalist, Pathologist, Oenologist, Microbiologist, Zoologist, Botanist, Mycologist, Marine Biologist, Ecologist, Biomedical Engineer.</p>