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WACE Courses (Years 11 and 12)

| | Course | | | | | |
|---------------------------------|--|--|---|--|--|--|
| | Biology | Human Biology | Integrated Science | Psychology | | |
| Science Enquiry Skills | The collection and analysis of data to provide evidence | Evaluate the impact of advancements in human biology on individuals and society Communicate understandings of human biology | Translate and analyse information to find patterns and draw conclusions | Interpret and evaluate findings in relation to ideas or hypotheses being tested | | |
| Science as a Human Endeavour | Explore the use and influence of science in society Assessment of science concepts, models and theories | Understand that knowledge of human biological systems has developed over time and continues to develop with improving technology Understand how scientists use knowledge of human biological systems in a wide range of applications | Understand the evolving nature of science Understand that scientific knowledge can be applied to solve problems | Systematic exploration into the complexities of human behaviour based on evidence gathered | | |
| Science Understanding | Use of scientific concepts, models and theories to explain and predict phenomena | Understand structure and function in the body | Understand interactions between components in living and physical systems Understand interactions between energy and matter | Understand factors relating to individuals, such as: cognition, or the way we think; biological bases of behaviour; and personality Understand psychology provides scientific explanations of behaviour with particular principles, procedures and approaches to data | | |
| Most relevant yr 11 | Unit 2: From cells to | Unit 1: The functioning human | | Unit 1: Biological Influences/Bases of | | |
| content | multicellular organisms | body | | Behaviour (Strong links) | | |
| Most relevant Yr 12 content | Unit 4: Surviving in a Changing environment | Unit 3: Homeostatis and Disease | Unit 4: Energy | Unit 3: Biological Influences/Bases of Behaviour (Strong links) | | |

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WA Curriculum (Years 5-10)

| Years 5 &6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---------------------------------|-------------------------------------|---|---|--------------------------------------|
| Use evidence to explain events | Scientific knowledge is refined as | Cells are the basic units of living things; | Multi-cellular organisms rely on | Scientific understanding is |
| and phenomena (ACSHE081, | new evidence becomes available | they have specialised structures and | coordinated and interdependent | contestable and is refined over time |
| ACSHE098) | (ACSHE119) | functions (ACSSU149) | internal systems (ACSSU175) | (ACSHE191) |
| Pose clarifying questions and | Science knowledge can develop | Multi-cellular organisms contain systems | Energy transfer through different | Advances in scientific understanding |
| make predictions about | through collaboration across the | of organs carrying out specialised | mediums can be explained using wave | often rely on technological |
| scientific investigations | disciplines of science (ACSHE223) | functions that enable them to survive | and particle models (ACSSU182) | advances and are often linked to |
| (ACSIS231, ACSIS232) | | and reproduce (ACSSU150) | | scientific discoveries (ACSHE192) |
| Describe observations, patterns | Solutions to contemporary issues | Scientific knowledge is refined as new | Advances in scientific understanding | People use scientific knowledge to |
| or relationships in data using | may impact on other areas of | evidence becomes available (ACSHE134) | often rely on developments in | evaluate whether they accept |
| digital technologies (ACSIS090, | society (ACSHE120) | Communicate ideas findings and | technology and technological | claims, explanations or predictions, |
| ACSIS107) | | evidence using scientific language | advances are often linked to scientific | and advances in science can affect |
| | | (ACSIS148) | discoveries (ACSHE158) | people's lives (ACSHE194) |
| | | | | |
| | People use science understanding | People use science understanding and | People use scientific knowledge to | Select and use appropriate |
| | and skills in their occupations and | skills in their occupations and these have | evaluate whether they accept claims, | equipment, including digital |
| | these have influenced the | influenced the development of practices | explanations or predictions, and | technologies, to collect and record |
| | development of practices in areas | in areas of human activity (ACSHE136) | advances in science can affect | data systematically and accurately |
| | of human activity (ACSHE121) | | people's lives (ACSHE160) | (ACSIS200) |
| | Identify questions and problems | Solutions to contemporary issues may | Select and use appropriate | Communicate scientific ideas and |
| | that can be investigated | impact on other areas of society | equipment, including digital | information, including constructing |
| | scientifically and make | (ACSHE135) | technologies, to collect and record | evidence-based arguments and |
| | predictions based on scientific | Describe observations, patterns or | data systematically and accurately | using appropriate scientific |
| | knowledge (ACSIS124) | relationships in data using digital | (ACSIS166) | language, conventions and |
| | | technologies (ACSIS111) | | representations (ACSIS208) |
| | | | | |
| | Describe observations, patterns | Science knowledge can develop through | Use knowledge of scientific concepts | |
| | or relationships in data using | collaboration across the disciplines of | to draw conclusions that are | |
| | digital technologies (ACSIS129) | science (ACSHE226) | consistent with evidence (ACSIS170) | |
| | Communicate ideas, findings and | identify questions and problems that | Communicate scientific ideas | |
| | evidence using scientific language | can be investigated scientifically and | including constructing evidence-based | |
| | (ACSIS133) | make predictions based on scientific | arguments and using appropriate | |
| | | KNOWIEage (ACSIS139) | scientific language, conventions and | |
| | | | representations (ACSIS174) | |