



CHRISTIAN HERITAGE COLLEGE

SC110

A CHRISTIAN APPROACH TO SCIENTIFIC INQUIRY

This sample unit outline is provided by CHC for prospective and current students to assist with unit selection.

Elements of this outline which may change with subsequent offerings of the unit include Content, Required Texts, Recommended Readings and details of the Assessment Tasks.

Students who are currently enrolled in this unit should obtain the outline for the relevant semester from the unit lecturer.

Unit code	SC110
Unit name	A Christian Approach to Scientific Inquiry
Associated higher education awards	Bachelor of Education (Primary) Bachelor of Education (Secondary) Bachelor of Arts/Bachelor of Education (Secondary)
Duration	One semester
Level	Introductory
Core/elective	Elective
Weighting	Unit credit points: 10 Course credit points: Bachelor of Education (Primary) 320 Bachelor of Education (Secondary) 320 Bachelor of Arts/Bachelor of Education (Secondary) 320
Delivery mode	Face-to-face on-site
Student workload	<i>Face-to-face on site</i> Contact hours 30 hours Reading, study and assignment preparation 120 hours TOTAL 150 hours Students requiring additional English language support are expected to undertake an additional one hour per week.
Prerequisites/ co-requisites/ restrictions	Nil
Rationale	<p>This unit introduces students to various ways scientists inquire into the natural world, by exploring issues that are emergent in the 21st century. It builds upon the key concepts developed in earlier introductory units with the aim to develop the concept of scientific investigation in conjunction with a Christian worldview.</p> <p>At the core of science is the call to investigate and understand the world around us through an inquiry method. Students will discover the historic foundations of the scientific method developed through the Christian church. Issues such as geological timescale, origins and age of the universe, cloning, genetically modified organisms (GMOs), animal welfare, IVF and cloning will be discussed. Students will be challenged to raise questions and reflect on the ethics of these questions through a faith based framework.</p>
Prescribed text(s)	Ashton, J. (2006). <i>The God Factor: 50 Scientists and academics explain why they believe in God</i> . Strand Publishing.
Recommended readings	Alexander, D. (2014). <i>Creation or evolution: Do we have to choose?</i> Sydney, NSW: Monarch Books. Alexander, D. (Ed.). (2007). <i>Can we be sure about anything?: science, faith and postmodernism</i> . Cambridge, UK: International Society for Science and Religion. Carlson, R. F., & Longman III, T. (2010). <i>Science, creation and the bible: reconciling rival theories of origins</i> . Downers Grove IL: InterVarsity Press.

	<p>Giberson, K. W., & Collins, F. S. (2011). <i>The language of science and faith: Straight answers to genuine questions</i>. Downers Grove IL: InterVarsity Press.</p> <p>Schaefer, H. F. (2013). <i>Science and Christianity: conflict or coherence?</i> (2nd ed.). Apollos Trust.</p> <p>Stanford, R. (1961). 'Christian and the scientific method'. <i>Westminster Theological Journal</i>. 25:1, 1-28.</p> <p>In addition to the resources above, students should have access to a Bible, preferably a modern translation such as The Holy Bible: The New International Version 2011 (NIV) or The Holy Bible: New King James Version (NKJV).</p> <p>These and other translations may be accessed free on-line at http://www.biblegateway.com. The Bible app from LifeChurch.tv is also available free for smart phones and tablet devices.</p>
Specialist resource requirements	Nil
Content	<ol style="list-style-type: none"> 1. Christian historic foundations of the scientific method 2. Scientific investigations 3. Raising questions 4. Ethics within a faith framework 5. Animal welfare 6. Cloning 7. GMOs and genetic engineering 8. IVF 9. Creation vs Evolution 10. Geological timescale 11. The age of the universe
Learning outcomes	<p>On completion of this unit, students will have provided evidence that they have:</p> <ol style="list-style-type: none"> 1. developed knowledge and understanding of the major concepts related to biological, physical and chemical fields of scientific understanding and investigation; 2. developed skills of and appreciation for scientific investigation as a strategy for studying God's creation; 3. reflected on biblical Christian worldview perspectives in relation to 21st century scientific dilemmas; 4. applied knowledge and skills to demonstrate autonomy, well-developed judgement, adaptability and responsibility about God's creation; 5. developed and applied scientific knowledge and skills to analyse solutions to complex problems; and 6. communicated at an appropriate tertiary standard: with special attention to design elements, grammars, usage, logical relations, style and presentation.
Assessment tasks	<p>Task 1: Investigative Report</p> <p>Word length/Duration: 2500 words</p> <p>Weighting: 30%</p> <p>Learning Outcomes: 1-6</p> <p>Assessed: Week 6</p> <p>Task 2: Weekly Reflections (Select the best 3)</p> <p>Word length/Duration: 200-300 words per week</p> <p>Weighting: 30%</p> <p>Learning Outcomes: 2-4, 6</p> <p>Assessed: Week 9</p>

	<p>Task 3: Group Presentation</p> <p>Word length/Duration: 20 minutes; 10 minutes for questioning</p> <p>Weighting: 40%</p> <p>Learning Outcomes: 1-6</p> <p>Assessed: Week 16</p>
<p>Unit summary</p>	<p>This second level unit introduces students to various ways that scientists inquire into the natural world, by exploring issues that are emergent in the 21st century. This unit aims to develop the concept of scientific investigation in conjunction with Christian worldviews. Students will discover the historic foundations of the scientific method developed through the Christian church. Issues such as geological timescale, origins and age of the universe, cloning, genetically modified organisms (GMOs), animal welfare and IVF will be discussed. Students will be challenged to raise questions and reflect on the ethics of these questions through a Christian faith based framework.</p>

SAMPLE