

**LIDLAW COLLEGE**  
*Te Wananga Amorangi*

BACHELOR OF TEACHING (PRIMARY) & WORLDVIEW STUDIES

**875.615 Science**  
**Course Assessment and Delivery Outline**

**Campus:** Auckland  
**Lecturer:** Dianne Scouller/Fiona Togia

Semester 1, 2015  
NQF Level: 6, 15 credits

**CONTENT OVERVIEW**

- a. Science and Scientific Method
- b. Science and Religion: dialogue and discourse
- c. Spectrum: Positions on creation and evolution
- d. Science and The NZ Curriculum
- e. Inquiry Learning for Teaching Science
- f. Science Project

**ASSESSMENT TASKS AND DUE DATES**

**ASSIGNMENT ONE**

Students will apply a 7 stage Inquiry Learning strategy to a Science Project based on the “Lift off to Learning” model which will include:

- a. Collating and managing resources, data, images, reflections and evidence of learning on an e-portfolio platform at all stages of the project
- b. Creating and photographing/recording a tangible or visual learning resource
- c. Presenting and sharing findings with the class
- d. Reflecting on pedagogy, process and affective/spiritual dimensions of learning Science

**Assignment One Criteria**

Students will demonstrate:

- Critical pedagogical reflection on the Inquiry Learning Strategy for teaching Science
- Acquisition of skills, knowledge, methods, attitudes and values relevant to the Inquiry Learning model
- Familiarity and engagement with *The NZ Curriculum (2007)*
- Understanding and application of scientific principles and method in the topic area.
- Creative and effective use of e-portfolio and other technologies

% Final Grade                      60%  
Related Learning Outcomes    1-5  
Due Date                                **5th May, midnight**

**ASSIGNMENT TWO**

Due to the undergirding nature of the theory of evolution in the science curriculum some teachers from faith background report challenges in their engagement with learning area content and frameworks. It is critical that teachers work professionally with all aspects of the science learning area in *The New Zealand Curriculum (2007)* in authentic, ethical, educated and professional ways while maintaining the integrity and conscience of their own beliefs.

Students will write a 2000 word critical reflection in essay form after an opportunity to engage with Science Education at the Auckland Museum. The essay should have the following categories:

- Write a coherent and logical summary of learning experienced at the Auckland Museum
- Using a range of credible reference material identify and critically evaluate a personally held position with regards to evolutionary theory and creation
- Critically evaluate personal and professional engagement the Science-Faith discourse noting the following in the context of NZ primary schooling:
  - Examples of how evolutionary theory undergirds the science learning area levels 1-8.
  - The ethical and professional obligation and imperative to teach the curriculum
  - The kinds of barriers, obstacles or limits that complicate Science-Faith discourse for teachers
- Write a concluding reflection on how to teach Science passionately, constructively and intelligently while maintaining both the professionalism and ethical responsibilities required as a NZ registered teacher as well as a robust and educated personal Faith position.

### Assignment Two Criteria

Students will demonstrate:

- Willingness to engage authentically and reflectively in Science-Faith discourse
- Ability to argue coherently and logically from an educated position
- Critical engagement of credible Science-Faith literature
- Demonstrate familiarity with the nature of Science as understood by *The NZ Curriculum (2007)*
- Critical and solution-oriented reflection on ethics, professionalism and faith as it pertains to teaching science.

% Final grade	40%
Related learning outcome	1, 2, 5
Due date:	17th April, midnight

### MARKING CRITERIA

See Cover Sheets for each of the above assignments.

### DETAILED INSTRUCTIONS FOR ASSIGNMENTS

See separate sheet.

### EXPECTED ALLOCATION OF STUDY HOURS

Class time	36 hours
Self-directed learning (including course reading)	114 hours
<b>TOTAL</b>	<b>150 hours</b>

### BIBLIOGRAPHY

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