LAIDLAW COLLEGE
Te Wananga Amorangi

BACHELOR OF TEACHING (PRIMARY) & WORLDVIEW STUDIES

861.615 Mathematics and Statistics 2
Course Assessment and Delivery Outline

Campus: Auckland — Semester 1, 2015
Lecturer: Dianne Scouller — NQF Level: 6, 15 credits

CONTENT OVERVIEW
a. The philosophical investigation of Christian worldview and its relationship to mathematics
b. Current pedagogical and social issues in mathematics education
c. Mathematics initiatives in New Zealand
d. Statistics education
e. Assessment in mathematics
f. Research in mathematics education
g. Development of personal mathematics skill and understanding.

ASSESSMENT TASKS AND DUE DATES

ASSIGNMENT ONE
Students will:
- write a 1500 word essay addressing pedagogical and social challenges of assessment in mathematics and statistics. This essay will focus specifically on assessment principles and practices through the lens of the Christian virtues of justice, mercy, and humility.

Assignment One Criteria:
Students should demonstrate:
- a growing awareness of how Christian values can be applied in current issues affecting mathematics and statistics;
- an awareness of the impact of assessment on the learning of mathematics and statistics;
- advanced writing, formatting and referencing skills.

% Final Grade	40%
Learning Outcomes	a, b, c, e
Due Date:	Thursday April 9th , 2015

ASSIGNMENT TWO
Students will:
- prepare and present the plan of a statistical investigation for a senior primary school class, which must include;
  - all the elements of the PPDAC cycle
  - evidence of probabilistic thinking
  - observation of the influence of media reports
  - a timeframe for the project
  - clear learning objectives, learning experiences, and assessment procedures
  - reference to appropriate sections of *The New Zealand curriculum (2007)* and *The New Zealand curriculum mathematics standards for years 1-8. (2009).*

Assignment Two Criteria
Students should demonstrate:

- an advanced knowledge and understanding of the content of current mathematics curriculum documents;
- an advanced level of skill in statistics;
- an awareness of the application of research in assessment principles and procedures to classroom teaching practices in mathematics and statistics;
- a sound knowledge of research issues relating to statistics education;
- an awareness of the application of research in statistics education to classroom teaching practices;
- use the electronic data bases *Education Research Complete,* and *Academic Search Premier* available through the Deane Memorial Library.

% Final Grade	60%
Learning Outcomes	b, d, e, f
Due Date:	Thursday June 4th 2015

EXPECTED ALLOCATION OF LEARNING HOURS

Class time	60 hours
Self-directed learning	90 hours
TOTAL	**150 hours**

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