



Course Outline

EDGDS6146 MATHEMATICS CURRICULUM 2

Title: MATHEMATICS CURRICULUM 2

Code: EDGDS6146

School / Division: School of Education

Level: Advanced

Pre-requisites: (EDGDS6023) (TD790)

Co-requisites: Nil

Exclusions: (EDGDS6124) (TD792)

Progress Units: 15

ASCED Code: 070301

Objectives:

After successfully completing this course, students should be able to:

Knowledge:

- Build confidence with the content of secondary school Mathematics
- Develop an understanding about processes of acceleration and remediation in Mathematics;
- Learn the techniques of teaching and learning Mathematics at the secondary level;
- Familiarise themselves with the impact of information technology in the learning of Mathematics.

Skills:

- Explore the history of Mathematics Education;
- Explore the “congruence between pedagogy, curriculum and assessment”;
- Explore specific issues relating to current practice in the teaching of Mathematics in Years 7-10 and the VCE;
- Consider alternative forms of assessment;
- Complete and assess VCE school assessed tasks;
- Develop skills in their own personal mathematical competence;
- Familiarise themselves with the use of handheld technology in the learning of Mathematics.

Values:

- Develop an understanding of the nature and place of Mathematics as a “critical filter for further education and training”;
- Consider the inclusiveness or otherwise of Mathematics, and the values we teach;
- Develop an appreciation of the role as a teacher of mathematics;
- Value the place of mathematics and mathematics education in society;



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- To enjoy mathematics.

Content:

Topics may include:

- The history of Mathematics Education;
- The teaching, curriculum and assessment of mathematics;
- The selection of specific issues relating to current practice in the teaching of Mathematics in Years 7-10 and the VCE;
- The exploration of acceleration and remediation in mathematics classrooms;
- The consideration and development of alternative forms of assessment;
- The content in VCE school assessed tasks;
- The use of information technology in the Mathematics classroom.

Learning Tasks & Assessment:

Learning Task	Assessment	Weighting
Plan, conduct and evaluate a Self-Study in Mathematics Learning and Teaching based around the theme of acceleration or remediation. This will incorporate: journal research; reflective practice; planning, implementing and evaluating a micro lesson. Relates to Objectives: K1, K2, K3, K4, S1, S2, S3, S4, S6, S7, V1, V2, V3, V4, V5	Lesson plan, teaching of micro lesson and written reflection.	40 – 60%
Develop and create an assessment task, to be implemented, reflected upon and refined. Relates to Objectives: K1, K3, K4, S1, S2, S3, S4, S5, S6, S7, V1, V2, V3, V4, V5	Production and presentation of the assessment task, including a comprehensive review of its strengths and weaknesses, and future modifications.	30 – 50%

Adopted Reference Style:

APA

Library Website:

http://ww.ballarat.edu.au/aasp/student/learning_support/generalguide/

Handbook Summary:

This course looks at the history of Mathematics Education as well as the "congruence between pedagogy, curriculum and assessment". Students will be required to explore specific issues relating to current practice in the teaching of mathematics in either years 7-10 or the VCE. Students will also be required to complete and assess a VCE school assessed task. A particular focus will be the use of information technology in the learning of mathematics.