

## REPORTS

# Mathematics 31 Curriculum Developments

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In March 1979, the Mathematics Curriculum Coordinating Committee was given approval to pursue revision of the Mathematics 31 course in keeping with changes in the Mathematics 10-20-30 and 13-23-33 programs.

A needs assessment was conducted by Alberta Education in May 1982. A proposed course outline was presented for reaction/discussion to postsecondary representatives at meetings held in Calgary and Edmonton in January 1983. The proposed outline was positively received without further revision by the postsecondary groups represented.

The Mathematics 31 Ad Hoc Committee was subsequently established to write course objectives organized into a core-elective format (80 percent core and 20 percent elective). The core would consist of calculus (50 percent of total term) and vectors (30 percent of total term).

	Portion of Total Term
1. Calculus (50%)	
A. Introduction to Calculus	
B. Derivative of a Function	38%
C. Applications of Derivatives	
D. Integration	12%
2. Vectors (30%)	
A. Geometric Vectors and Their Application	11%
B. Algebraic Vectors and Their Application	13%
C. Dot Product	6%
3. Electives (20%)	
A. Volumes of Revolution	7%
B. Trigonometric Extensions	7%
C. Calculus of Trigonometric Functions	13%
D. Calculus of Logarithmic Functions	13%
E. Matrices and Linear Transformations	13%
F. Polar Coordinates	7%
G. Systems of Linear Equations	7%

Negotiations between Alberta Education and Holt, Rinehart and Winston of Canada, Ltd., are currently under way with the aim of producing a single text that will deal with the above-mentioned topics. Appropriate sections of currently prescribed texts will be reprinted.

The *Mathematics 31 Pilot Curriculum Guide* (September 1983) is currently being piloted in 12 schools across the province. Pending a positive response to the proposed course outline, approval to implement the program of studies statements effective September 1984 will be sought from the Curriculum Policies Committee.