

SIMON FRASER UNIVERSITY

EDUCATION 367-4 (D1.00)

**INTEGRATING ESL LEARNERS IN DIFFERENT SCHOOL SUBJECTS:
SCIENCE AND MATHEMATICS**

(Cat. #72231)

Regular Summer Semester, 1994
(May 2–July 29)
Wednesday, 13:00–16:50
Location: MPX 7600F

Instructor: Gloria Sampson
Office: MPX 8671
Phone: 291-4303

PREREQUISITE: 60 hours of credit

AIMS

This course is for teachers and future teachers who have no training or interest in teaching language as such, but who expect to have learners of English as a second language in their science and mathematics classes. Students in this course learn to use a set of instructional techniques that help ESL learners acquire the kind of language, oral and written, required for effective functioning in the subject areas of science and math.

TOPICS

1. How thinking, talking, reading and writing differ in mathematics and science registers of English from thinking, talking, reading and writing in the humanities registers of English.
2. Teaching the talk required for effective mathematical problem-solving.
3. Teaching content-area talk and reading and science.

ASSIGNMENTS

1. Analyzing the talk used by native speakers and non-native speakers in mathematical problem solving and devising lesson plans to teach appropriate math talk. (50% of total grade)
2. Devising lesson plans for teaching reading skills in science for ESL learners. (30%)
3. Lesson plans for teaching ESL learners cognitive self-instruction techniques so that they learn how to learn math and science language on their own. (20%)

REQUIRED TEXTBOOKS

Sampson, Gloria. *Language and Mathematics*. (A xeroxed prepublication copy of this book will be available for purchase on the first day of class).

Collins Cobuild English Grammar. (1990). London: HarperCollins.

Osborne, Roger & Freyberg, Peter. (1985). *Learning in Science: The Implications of Children's Science*. Auckland, New Zealand: Heinemann.