

**SIMON FRASER UNIVERSITY**

**EDUCATION 388-4**

**SPECIAL TOPIC: DOING MATHEMATICS IN INTERMEDIATE GRADES:  
PROBLEMS AND METHODOLOGIES  
(E1.00)**

Intersession, 1992  
(May 4 – June 12)  
Monday & Wednesday, 5:30 – 9:20 p.m.  
Location: AQ 5049

Instructor: Rina Zazkis  
Office: MPX 8654  
Phone: 291-3662

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**PREREQUISITE: EDUC 401/402**

**DESCRIPTION OF COURSE**

The course will integrate two main formats: Laboratory and Seminar. The Laboratory will involve students in a variety of mathematical activities (that is, "doing mathematics"), that invite students to explore unfamiliar environments and to experience the process of construction of new mathematical knowledge. These activities are not necessarily related to the standard curriculum in mathematics, although they are applicable, with some modification, to intermediate grades. The Seminar will involve students in discussions of these activities (that is, "thinking about what they did"), addressing mathematical problems and methodological issues. Classroom implementations of such activities will be suggested. Furthermore, through the seminar discussions and related literature, students will become familiar with problem-solving theories and constructivist views on the teaching and learning of mathematics.

**REQUIRED TEXT**

Brown, S. and Walter, M. (1990). The art of problem posing. Lawrence Erlbaum Associates .

**ASSIGNMENTS**

Attendance and active participation in discussions  
Presentation to the class  
Project based on literature  
Project based on designing mathematical activities for intermediate grades.