

Summer Session 2001

**EDUC 416 - 4**  
**Designs for Learning: Secondary Science**

Valerie Silver  
Office: EDB 9508  
Phone: 291-5991 / 886-9769  
Email: vsilver@sfu.ca

**D02.00**

Tuesday & Thursday 9:30-15:20 in EDB 7600

**PREREQUISITES**

Educ 401/402

**COURSE DESCRIPTION**

How can we teach science so students incorporate new concepts into their thinking to make informed choices, solve problems, and think critically. We will examine recent research on how we learn and seek ways to bring theory into practice in the classroom. Emphasis will be on moving from the big ideas of science to designing engaging and meaningful classroom activities which effectively achieve intended learning outcomes as well as providing the means to accurately assess what has been learned. A variety of teaching methods will be presented and applied.

Designing lessons and units in groups will give students the opportunity to share areas of expertise, generate creative methods of engaging students in learning, and come away with several completed unit plans.

**COURSE REQUIREMENTS**

- Assignments associated with course readings - 20%
- Group presentations of lessons and units - 40%
- Individually developed unit plan - 40%

**READINGS**

Daniels, H. & Bizar, M. (1998). Methods that Matter. Markam, ON: Pembroke Publishers.

Course Readings Booklet