

Intersession 1999

Dr. S Dawson

EDUC 475 - 4 Designs for Learning: Mathematics

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PLEASE NOTE MEETING TIMES BELOW: Tuesdays, 5:00 pm
to 8:30 May 4 to June 29th, inclusive: Two Saturdays, May 29th
and June 19th, 9:00-3:00

PREREQUISITE

Educ 401/402 or equivalent.

DESCRIPTION OF COURSE;

This course is designed for prospective and practising elementary school teachers who wish to explore fundamentals of the learning/teaching process as it applies to mathematics.

COURSE REQUIREMENTS:

1. Attendance and Participation (10%)

Students are expected to attend all classes, to do all assigned readings, to participate responsibly and constructively in class activities, and to engage in thoughtful and informed discussion of course topics. As a great deal of class time is spent in cooperative group activities, students are expected to contribute to group discussions by sharing their understandings and perspectives and by encouraging other group members to do the same.

2. Investigation of a math situation (15%) Report on journey to be submitted no later than May 29th.

Students will be provided with a mathematical challenge on which they are to work on for the month of May. A solution for the challenge is not of prime importance. What is important is for students to study themselves as they grapple with the challenge. Students are to keep a journal of their thoughts and feelings as well as approaches they take in coming to grips with the challenge. This is to be a case study of one learner's (you) journey as s/he tackles this challenge.

3. IRP Grade Level Focus Group (15%) Date of Group Presentation: May 25th

Working groups will be formed based on students grade level preference. The task of each small group is to become thoroughly familiar with the IRP for the grade level(s) chosen:

- to identify the conceptual and procedural underpinnings

- to identify instructional strategies

- to begin to gather teaching materials

and to present their preliminary findings to the whole class in a 'station' approach

4. Reflective Writing (20%) Reflective writings to be completed in class on May 18, June 8th, June 22nd,

Three times during the semester students will be asked to do a reflective 'write' at the conclusion of the Tuesday class. These writings will focus on specific questions provided by the instructor.

5. Individual Project (40%)

This assignment gives students the opportunity to address individual interests and work toward their own professional goals. The individual project may take the form of delving deeper into the theory of mathematics education, designing instructional materials and activities, preparing a teaching project, etc. The finished project should demonstrate the student's understanding of the pedagogical issues imbedded in the work and her/his ability to apply the "theoretical" understanding to classroom teaching at her/his level of interest. Some topics/ideas you might consider are:

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