SEMINAR IN TEACHING MATHEMATICS  
Math 305 — Fall 2004

The seminar is offered on a pass-fail basis only and does not count towards the major or minor in mathematics. (2 units)

Instructor: Dr. Lynne Small  
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Office Hours:  
MW: 1:30 - 3:30 pm  
T: 2:30 - 3:30 pm

Final assessment:  
Wednesday, Dec. 15, 11 am - 1 pm

Course web site: http://home.sandiego.edu/lsmall/m305-f04.html

This seminar is a required course for the Mathematics Single Subject Credential Program at the University of San Diego. Many of the topics are mandated by the State of California as preparation for teaching in California.

We will take up issues in:
- the history of mathematics education in the United States
- the secondary mathematics curriculum
- gender, culture, ethnicity, and socio-economic status
- differences in learning styles and teaching methods
- methods of assessment
- the role and influence of technology

Many of the above issues are surrounded by controversy. Developing competence and confidence in judging the merits of the arguments presented and foreseeing their practical consequences are major purposes of the seminar. To this end, we will read closely, view statistical claims skeptically, and discuss both the basis of claims and their practical implications.

Requirements:
- tutoring students of diverse backgrounds for two hours a week
- keeping a journal on the tutoring
- three papers accompanied by oral presentations
- reading and assorted day-to-day homework as assigned
- participation in class discussions

In lieu of a final exam, students will prepare an “imaginary” portfolio of their work as math majors and in the secondary credential program and give a final oral presentation. Actually, you will need to prepare a real table of contents for the portfolio with explanations for the entries, but no contents.