

MED 600 Curriculums in Mathematics Education.
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Send ASSIGNMENTS TO my Email

PURPOSE OF THE COURSE:

- Teachers will understand the historical factors, which define the fundamental concepts that define the parameters of school, society learning and curriculum.
- Teachers will demonstrate how past and present curriculum developments that influence the present day curriculum.
- Teachers will understand the motives of change and the psychological theories that drive curriculum.
- To develop curriculum relative to the new National and State Standards.

SCOPE OF THE COURSE:

I. Historical Overview

- A. Concepts of School Setting
- B. Causes of Change
- C. Emergence of the PEA Movement
- D. Mathematics Education 1894 - 1952
- E. New Mathematics Movement

II. Concepts of Learning

- A. Learning as a Growth Process
- B. Learning as Conditioning

III. Organizing Learning Experiences

- A. The Scientific Movement
- B. The Child-Study Movement
- C. The New Math Movement
- D. Back to Basics Movement
- E. The Reform Movement
- F. Standards Movement

IV. Concepts of Curriculum Design.

- A. Psychological Theories
- B. The Structure of Curriculum Design
 - i) Behavioral Approach
 - ii) Structuralist Approach
 - iii) Formalist approach
 - iv) Cognitive Approach
- C. Designing a Model for Implementation

V. Sample Experimental Curriculum Reviewed

University of Illinois Committee on School Mathematics
Madison Project

School Mathematics Project
School Mathematics Study Group
Elements of Mathematics
Comprehensive School Mathematics Program
Oregon Project - Mathematics Resource Project
Quantitative Literacy Series
Statistics in Your World

VI. Present and the Future

- A. NAEP
- B. NCTM Standards
- C. New Compact for Learning
- D. Project 2061
- E. NYS Standards
- F. The Sabre-tooth Curriculum

EVALUATION

Assignments 30%
Class Participation 10%
Presentations 40%
Test 20%
Final Evaluation 10%

Assignments will be given weekly. They will be submitted by email. No assignments will be accepted late.

A test on the readings and presentations.

Presentations

Each person will be a member of a working group that will present to the class a teacher-training unit on curricula and the standards. You will be expected to meet outside the regular class time.

The presentations will assigned be to you with guidelines. The group will receive a grade for each presentation.

Materials:

Materials will be distributed weekly. It is recommended that you must become a member of NCTM at www.nctm.org.

BEHAVIOR:

"All students are expected to comport themselves in a manner that does not convey to others in the college community any disrespect, intolerance, or rude behavior based on age, race, religion, color, national origin, gender, sexual orientation, disability, or marital, veteran, or socioeconomic status. All members of the college community are expected to contribute to the college environment to move the college community in the direction of respect for all".

and

"The instructor may have removed from the classroom anyone who, in the instructor's opinion, is disrupting the educational process, and pursue formal changes against the student under the college judicial system, pursuant to Buffalo State College's Procedure Regarding Disruptive Individuals."

Use of Cell Phones:

Only leave your cell phone on if you are facing an emergency situation. Please inform me in advance. Otherwise please turn it off or choose vibrate as your ringer.

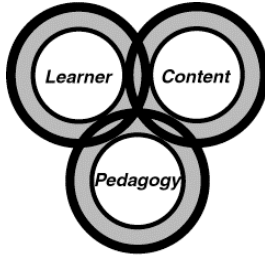
Academic Honesty Policy:

You are expected to complete assignments on your own. No collusion is permitted on homework, projects, and tests. The penalty for collusion is a zero for that assignment or project. If you are unable to take a test a notice of 2 hours must be given. Documentation is required.

Accommodations for Students with Disabilities:

"If you have a disability or suspect that you have a disability that requires any type of accommodation to fulfill the requirements of this course, please contact the Office of Special Services for Students with Disabilities at 878-4500."

How this course fits into the college's NCATE conceptual framework.



Critical Knowledge/Skill Areas:

Diversity: This course is committed to the concept that all children can learn and due to diversity learn in different ways.

Technology: We will use computers throughout the course. You will need to have access to a computer with Internet access.