

APPROVAL FORM

10

- 1) An approval form must accompany each proposal.
- 2) A proposed catalogue description of the course must accompany the proposal as a separate page.
- 3) Results of all consultations must be attached to the proposal.

Proposal Title Elementary School Mathematics Clinic - 0802.517

Sponsor(s) Dr. Louis Molinari Dept. Elementary Education

Check One { Course          Credit/Level/Title Change or deletion Other           
 Concentration          Specialization          Major Program          Certification         

Graduate  Undergraduate          No. of Credits 3 s.h.

Approved  
 Not Approved           
Maurice R. Habes  
 Dept. Curr. Comm. Chairperson  
11/2/81  
 Date

Division Curr. Comm.  
 Reviewed 2/23/82  
 Date

Dean of Division  
 Reviewed 2/24/82  
 Date

Approved  
 Not Approved           
Maurice R. Habes  
 Chairperson, Department  
11/5/81  
 Date

Approved  
 Not Approved 2/23/82  
 Date

Mary Jannerborn  
 Chairperson Div. Curr. Comm.

James Waver  
 Signature

SENATE CURRICULUM COMMITTEE

SCC # 81-82-16 Proposal Received          Open Hearing Held         

Returned to the department for the following reason(s):

Approved by the Curriculum Committee: Date         

Presented to Executive Committee of the Faculty Senate as information: Date 11/10/81

Notifications forwarded: Vice President for Academic Affairs: Date 11/10/81

Signature: Chairperson, Senata Curriculum Committee



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Dept. Curr. Comm. Chairperson           
          
Date         

Approved           
Not Approved         

Chairperson, Department           
          
Date         

Division Curr. Comm.  
Reviewed           
Date         

Approved           
Not Approved           
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Chairperson Div. Curr. Comm.         

Dean of Division           
Reviewed           
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Signature         

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## COURSE PROPOSAL

1. Title of Course: Elementary School Mathematics Clinic (0802.517)  
Department: Elementary Education Department  
Sponsor: Dr. Louis Molinari
2. Essence:
  - A. Graduate Course
  - B. Semester hour credits: 3
  - C. Course level - Graduate
  - D. Prerequisites: Identification and Treatment of Math Deficiencies (0802.556)
  - E. Effect of the course on current and planned departmental pattern:  
This course can be used to meet program requirements for Post-Baccalaureate Achievement Certificate in Elementary School Mathematics or serve as an elective in the Master's Program.
  - F. Suggested time and scale of implementation: Summer Session - 1982
3. Details:
  - A. Resources: Present staff, library resources and space requirements are adequate for planned implementation of this course. Futhermore, needed diagnostic materials were purchased for the initial offering of this course in the summer of 1981.
  - B. Uniqueness: The ability to diagnose children's deficiencies in mathematics and to write prescriptions for the treatment of his/her deficiencies is an important ability teachers need. This course gives the graduate student an opportunity to develop and refine these abilities in a supervised clinic (lab) situation. It is a unique experience in that it is the only supervised laboratory experience afforded the graduate student in Elementary Education.
  - C. Objectives: By the end of the course students will be able to:
    - (1) Survey broad areas of a child's basic math skills and pinpoint specific difficulties.
    - (2) Develop and implement remedial or corrective activities based on the diagnosis.
    - (3) Administer survey tests and diagnostic tests based on a thorough knowledge of assessment and diagnoses instruments and strategies.
    - (4) Choose appropriate teaching techniques based on knowledge of varied math teaching programs, materials and strategies.

D. Evaluation: Evaluation will be based on the following:

- (1) Assessment of a diagnosis write-up done by each student on a pupil enrolled in the clinic.
- (2) The written remedial planning done by each student for a pupil enrolled in the clinic.
- (3) Clinical observations done by the instructor.
- (4) Participation of the graduate student in the various seminars conducted throughout the course.

4. Content of the Course:

This course will give the graduate student (in-service teacher) an opportunity to learn to identify the mathematics competencies of children and institute an instructional program. It will help the graduate student establish a learning environment that enriches and enlarges the mathematical competencies of children.

Outline of Experience Areas: Four aspects of the child's mathematical environment will be involved:

- (1) Diagnosing of mathematical competencies
- (2) Prescribing sequences of instruction which are chosen for use
- (3) Developing appropriate instructional strategies
- (4) Instituting the instructional program

Experience in diagnosis will be provided on three levels:

- (1) General diagnosis
- (2) Analytical diagnosis
- (3) Prescriptive diagnosis

5. Rationale

This course was first offered as an experimental course during the Summer Session of 1981. A major purpose of the initial offering was to test the appropriateness of establishing it as a permanent course offering. Based on this very successful trial experience and evaluations received, a decision was made by the sponsoring department to submit a permanent course proposal to the All College Curriculum Committee.

Specific Goals, Purposes, Outcomes, Etc.

It is the purpose of this course to:

- (1) Establish a model in which graduate students (in-service teachers) can further develop and apply the skills of diagnosing and treating children with deficiencies in mathematics.
- (2) Provide an opportunity for graduate students (in-service teachers) to learn new diagnostic and treatment techniques other than those used in their employing school districts.

This course will also serve the educational community by helping to establish a center for clinical experiences in elementary mathematics education at Glassboro State College.

6. Results of Written Consultations: The course was approved by the Elementary Mathematics Education Committee, the Elementary Education Department Graduate Advisory Committee, the Dean of Professional Studies and the members of the Elementary Education Department.
7. Additional Information:

Methodology to be used in teaching the course: Since the course is clinical in nature, the instruction will be done in the clinical setting and in the seminar held after the clinical experience on a routine basis. Both individual and group conferences with the graduate student will be an integral part of the methodology.

8. Catalog Description:

This course provides an opportunity for the graduate student to directly apply skills related to the diagnosing and treating of mathematics deficiencies in elementary school children. The graduate student will use current assessment instruments and plan strategies for diagnosing and improving the mathematics skills and concepts of an elementary school child who is deficient in mathematics and has enrolled in the clinic. This course consists of both formal classwork and working with a child enrolled in the clinic.

STUDENT EVALUATIONS

OCT 22, 1981

During the summer of 1981 I was enrolled in the course, CLINICAL EXPERIENCE IN ELEM. SCH. MATH. I believe this course served as an excellent experience for practical application.

This course enriched my knowledge as a math teacher. It enabled me to gain insight into the sequential development of mathematical concepts through identification of prerequisite skills. This course provided me with an opportunity to apply this information through diagnosis & prescription. The experience of working with a student allows deeper & more meaningful understanding of this process.

The only improvement I could foresee would be to change the duration of the course. The sessions appeared too long & over too short a period of time.

I believe it would be in the best interests of this college to consider this course on a permanent basis.

Theresa Sparacio

Ginger Wallace

Ident/Treat Math Def.  
Clin Exp El Sch Math

The Math Clinic gave me an opportunity to apply skills and methods learned in Ident/Treat. Application of techniques and knowledge immediatly is great reinforcement and tends to promote more meaningful understanding. I personally have benefited greatly by having completed these courses.

The Math Clinic should definatly remain as a requirement for the certification program.

For future classes it would be helpful if schedualing could allow the Clinic work with the children to be completed one week before class time with the professor. Sharing and discussing experiences would add to the overall learning for the graduate student.

10/22/81

The Clinical Experience in Elementary Mathematics course gave me a chance to put theory into practice by providing the time and opportunity to actually use the knowledge, materials and procedures we were discussing in a clinical experience. I learned (and will probably remember) more by actually having to perform the testing, diagnosing and teaching. The problems encountered in the actual implementation of the theories we were studying could be investigated and solved during course time. Ideas could be shared with the entire group and suggestions could be discussed and evaluated. I feel other students would profit by, and better utilize their time, with a course of this design as opposed to traditional course scheduling.

However, I feel more time should be provided so that remediation of the discovered math deficiencies of the students could take place.

Sincerely,

Dil Felmer

Catherine Johnson

Clinical Experience in Elem. Math was very valuable to me as a supplemental math teacher. It afforded me actual, first hand experience in testing, identifying and analyzing problems. I was made aware of various tests that could be used for testing. This course should become a permanent offering so that others could be afforded the same opportunity. It afforded me the opportunities as listed above.

I would suggest that the program be improved in some areas: have more children available; have children who are in need of remediation; provide more time for remediation as it took quite a long time for testing and diagnosing problems; children should not be permitted to leave during class session; parents should be informed of all specifics before enrolling their child into program.

Susan Plence

The course in which I participated this past summer, Workshop Experiences in Elementary Mathematics, was of great value to me in understanding why some children have problems with math. It helped me to distinguish between rote learning and real understanding. It gave me an opportunity to tutor a student who had some math difficulties and co-work with someone who teaches at a different level than I, thereby exposing me to new ideas and teaching methods.

This course should be made a permanent part of the curriculum as I feel it will be invaluable to all who enter the math certification ~~program~~ program. Some of my reasons have been previously stated. Each person involved in the clinic will have their own reasons for supporting this program.

some improvements & feel are necessary are: ① more clinic time - we had approximately 3 weeks - there should be 6 weeks - more time to work with the students; testing, diagnosing, remediation, evaluation. Our first 3 weeks were spent waiting for students, since we needed ② notification of the existence and availability of this program to the area public schools so that teachers can inform students & parents about this program; ③ more clinic time for partners to organize a plan of action.

The experience was informative, educational, and enjoyable, and I sincerely hope other graduate students will be afforded this opportunity.