

Faculty Senate Curriculum Committee

Approval Form

22 b

Proposal Title: Basic Algebra

Sponsor(s): Fran Masat Dept.: Math/Computer Science

Betsy Collins Testing/Basic Skills

Check one: Course Specialization Concentration Achievement Certificate

Certification Program Major Program Minor Change IN DELIVERY
(please name: deletion or credit/title/catalog change)

Undergraduate Graduate Credit Hours

<p>Step 1 (Department)</p> <p><input checked="" type="checkbox"/> Approved <u>12-8-86</u> Date</p> <p><input type="checkbox"/> Not Approved</p> <p><u>Ronald J. Zocher</u> Dept. CC Chairperson</p> <p><input checked="" type="checkbox"/> Reviewed <u>12-8-86</u> Date</p> <p><u>[Signature]</u> Chairperson, Dept.</p>	<p>Step 2 (Receipt)</p> <p>SCC# <u>52-57-37</u></p> <p>Proposal Received <u>12/10/86</u> Date</p> <p><u>[Signature]</u> Chairperson, SCC</p>	<p>Step 3 (School CC)</p> <p>Reviewed <u>[Signature]</u> Date <u>6/3/87</u></p> <p><input checked="" type="checkbox"/> Approved</p> <p><input type="checkbox"/> Not Approved</p> <p>Comments: <u>This is a revision of the original proposal.</u></p> <p><u>[Signature]</u> Chairperson, School Curr. Comm.</p>
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Step 4 (Academic Dean)

Reviewed 3-12-87
Date

Comments: Minor essentially as a revision for algebra B-11-11-86

[Signature]
Signature, Dean of School

Step 5 (SCC)

Open Hearing 5/4/87
Date

Approved by Senate Curriculum Committee 5/4/87
Date

Returned to sponsor(s) for the following reasons:
[Blank]

Step 6 (Faculty Senate)

Presented to Faculty Senate : 5/8/87
Date

Approved Not Approved

Notification to Vice-President Academic Affairs 5/18/87
Date

[Signature]
Signature, SCC Chairperson

Step 7 (Vice-President for Academic Affairs)

Received 5/27/07
Date

Approved Yes No

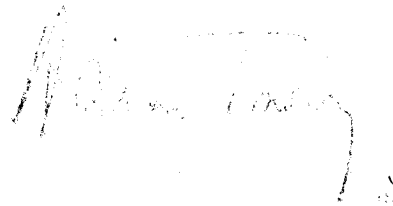
If no, reasons are as follows:

Student credit hours 3

Faculty load hours 3

Equalized credit hours 3

Official copy and approval sheet filed 5/27/07
Date



Signature _____
Vice-President for Academic Affairs

Registrar

Approved course description received _____
Date

Hegis Taxonomy and Course Number assigned _____

Signature _____
Registrar Date

Notification forwarded: Senate Curriculum Committee Chairperson, Department Chairperson(s), Academic Dean(s), Registrar, Sponsor(s).

PROPOSAL FOR A COURSE TO BE TAUGHT IN THE STATE OF MISSISSIPPI

1. DETAILS:

- a. Course title: Pre-Algebra (The course is a hybrid of Algebra A and Algebra B, as required by the Algebra 1 standard)
- b. Sponsors: Dr. Forrest Hutto/Computer Science
Debra Collins, Math Coordinator
5C Posting/Barbara White
- c. Credit hours: 3
- d. Course Level: Basic Skills (Developmental)
- e. Curricular effect: Remedial

2. RATIONALE:

At the present time the potential algebra course is treated as two quarter courses, Algebra A and Algebra B. There are two problems with this quarter-course structure. First, there are three teaching days lost each quarter due to diagnostic testing, posttesting, and advisement, all of which are required by state rules for each developmental course. By treating the two quarter courses as one unit we eliminate the loss of these days, days which are much needed for instruction. The second problem is the uneven number of teaching days in each semester. By treating the two quarter courses as one we gain the flexibility to better adjust the time that we have to the actual teaching needs of the students. In sum, the implementation of this proposal will (1) protect an increase in actual instruction time, and (2) provide instructors with greater flexibility in the allocation of time for teaching and learning tasks.

3. PURPOSE OF THE COURSE:

a. Objectives: The objective of this course is to develop basic knowledge, skills, and attitudes in algebra for students who are not yet proficient, to provide students with a well-developed background for college-level courses, and to assist students in developing a positive attitude toward math.

b. Course outline: See attached

c. Evaluation: A posttest is administered to all students enrolled in Developmental Education courses. This test consists of 30 questions and is the algebra section of the MICBSP1. The score on this test and the teachers' recommendation will determine the student's grade. A student will pass if the student successfully completed the posttest. If not, in progress. If the student test results are deficient, the second part of the course will be for a credit of 1/2. The student will not be required to repeat the course. Student

receiving the grade D will be required to take D2 plus the Algebra Skills.

d. Course Evaluation: The D2 course evaluation will be evaluated in accord with the course criteria and procedures of those that have been utilized in evaluating Algebra A and Algebra B.

4. Persons consulted:

- a. Dr. Fran Nasat, Chairman Math/Comp Sci.
Dr. Claude Damico, Director Special Support Services
Reg McEadden, Director Testing/Basic Skills
Adjunct faculty teaching Algebra A and Algebra B at present time

III. COURSE CONTENT

- A. Diagnostic testing
 - 1. Confirms class placement
 - 2. Provides a profile of strengths/deficiencies
- B. Signed Numbers/Algebraic Properties
 - 1. Order of operations
 - 2. Addition/Subtraction
 - 3. Multiplication/Division
 - 4. Simplification
- C. First Degree Equations
 - 1. Solving equations
 - 2. Solving applied problems
- D. Exponents
 - 1. Positive/Negative
 - 2. Simplification
- E. Polynomials
 - 1. Single/Several Variables
 - 2. Addition/Subtraction
 - 3. Multiplication/Division
- F. Factoring Polynomials
 - 1. Monomial/Binomial/Triomial
 - 2. Solving equations/Applied problems
- G. Algebraic Fractions
 - 1. Simplification
 - 2. Performing arithmetic operations
 - 3. Working with complex fractions
 - 4. Solving fractional equations
 - 5. Solving applied problems
- H. Graphing
 - 1. Linear equations
 - 2. Non-linear equations
- I. Systems of equations
 - 1. Solve by graphing
 - 2. Solve by substitution
 - 3. Solve by addition
 - 4. Solving applied problems
- J. Inequalities
 - 1. Solve by addition/multiplication
 - 2. Solve by graphing
 - 3. Solving applied problems
- K. Radical Expressions
 - 1. Arithmetic operations
 - 2. Simplification
 - 3. Solving radical equations

IV. EVALUATION

The students will be evaluated by the instructor on the basis of assignments, class participation, chapter tests, and the Algebra section of the midterm.