

12-15

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No. <u>H-100</u>	UWUCC Action-Date: <u>W-10/30/12</u>	Senate Action Date:
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Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Parveen Ali	Email Address pali@iup.edu
Proposing Department/Unit Developmental Studies	Phone 724-357-2729

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply)

New Course
 Course Prefix Change
 Course Deletion
 Course Revision
 Course Number and/or Title Change
 Catalog Description Change

DVST 091 Developmental Mathematics: Arithmetic Operations
Current course prefix, number and full title

DVST 091 Developmental Mathematics: Arithmetic Operations and Basic Algebra
Proposed course prefix, number and full title, if changing

2. Additional Course Designations: check if appropriate

This course is also proposed as a Liberal Studies Course.
 Other: (e.g., Women's Studies, Pan-African)
 This course is also proposed as an Honors College Course.

3. Program Proposals

New Degree Program
 Program Title Change
 Program Revision
 New Minor Program
 New Track
 Other

Current program name _____ *Proposed program name, if changing* _____

4. Approvals		Date
Department Curriculum Committee Chair(s)	<i>Parveen J. Ali</i>	2/13/12
Department Chair(s)	<i>M. Ali</i>	2/13/12
College Curriculum Committee Chair	<i>Jay [Signature]</i>	2/16/12
College Dean	<i>[Signature]</i>	2/17/12
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs		

Received
FEB 21 2012
Liberal Studies

Part II Description of Curriculum Change

1. New Syllabus of Record

See Attachment A for the new syllabus of record.

3. Summary of proposed revision

The principle revisions of course description and syllabus of DVST 091 Developmental Mathematics: Arithmetic Operations and Basic Algebra are contained in Attachment A, the new syllabus of record.

3. Justification of the Revision

Presently, there is a required sequence of two 1-credit developmental math courses for freshman students who score relatively low on the COMPASS math placement test. DVST 091 *Developmental Mathematics, Arithmetic Operations* (1 cr.) is offered the first half of a semester, followed by DVST 092 *Developmental Mathematics, Elemental Topics* (1 cr.) offered the second half of the same semester. (Note: Another developmental math course, DVST 093, is required for freshman students needing college algebra, calculus, or mathematics for business for their majors and, therefore, is not part of this sequence.)

We are proposing combining the two courses--DVST 091 and DVST 092--into a 2-credit course, to be titled DVST 091 *Developmental Mathematics: Arithmetic Operations and Basic Algebra*. This revised DVST 091 course will meet twice/week throughout the entire semester. The instructor will cover the same content as in the previous courses, but students will be required to schedule only one section, eliminating much of the unnecessary complications and confusion (for both students and advisors) that result in the current arrangement. Also, a single 2-credit course that meets the same days, time, and location throughout the entire term will result in a smoother transition in coverage of course content. Furthermore, combining course content into two credits will result in more flexible instructional time so that the instructor can allocate more class time for difficult concepts, balanced with less time on the easier concepts.

4. Old Syllabi of Record

See attachment B for the old DVST 091 Developmental Mathematics, Arithmetic Operations syllabus of record.

See attachment C for the old DVST 092 Developmental Mathematics, Elemental Topics syllabus of record.

5. Letters of Support

N/A

I. Catalog Description

DVST 091 Developmental Mathematics: Arithmetic Operations
and Basic Algebra

2c-01-2cr

Prerequisite: A student may not register for this course after successfully completing any course offered by the Mathematics Department without written approval from the Department of Developmental Studies chairperson.

Assists students in developing basic arithmetic skills and their applications. Includes operations with whole numbers, decimals and fractions; the concepts of ratios, proportions and percents; graphs and statistics; and an introduction to algebra. Carries institutional non-degree credit. Attendance is required.

Note Regarding Course Credit: As described in the Undergraduate Catalog, this course carries institutional, non-degree credit. Institutional credits are associated with developmental courses numbered below 100. Credits from this course do not apply toward degree requirements for graduation but are used in determining enrollment status (full- or part-time) including financial aid and athletic (NCAA) eligibility.

II. Course Outcomes:

After successfully completing this course, students should be able to:

1. Use place value, write and compare numbers and order and round numbers.
2. Perform different operations on whole numbers by solving application problems.
3. Find prime factorization of numbers.
4. Find the least common multiple (LCM) and greatest common factors (GCF).
5. Add, subtract, multiply and divide fractions and mixed numbers.
6. Rename fractions as decimals.
7. Rename decimals as fractions.
8. Rename numbers as percents.
9. Rename percents as numbers.
10. Understand and apply the concept of percent.
11. Understand and apply the concept of proportion.
12. Find the mean, median, and mode of a distribution.
13. Appropriately construct and interpret bar, line, and circle graphs.
14. Simplify and evaluate algebraic expressions and translate phrases to algebraic expressions.
15. Add, subtract, multiply, divide, and solve application problems involving real numbers.
16. Solve linear equations.

III. Course Outline

- A. Whole Numbers (4 hours)
 - 1. Standard notation; Order
 - 2. Application and Problem Solving on Whole Numbers
 - 3. Exponential Notation and Order of Operations
 - 4. Factorizations
 - 5. Least Common Multiples and Greatest Common Factors

- B. Fractions (5 hours)
 - 1. Fractional Notation and Simplifying
 - 2. Multiplication and Division
 - 3. Addition and Subtraction
 - 4. Order of Operations
 - 5. Exam (1 hour)

- C. Percents (4 hours)
 - 1. Ratio and Proportion
 - 2. Percent and Fraction Notation
 - 3. Solving Percent Problems Using Percent Equations
 - 4. Sales Tax, Commission, Discount, and Interest

- D. Data Analysis, Graphs, and Statistics (3 hours)
 - 1. Mean, Median, and Mode
 - 1. Bar, Line, and Circle Graphs
 - 2. Exam (1 hour)

- E. Introduction to Real Numbers (4 hours)
 - 1. Addition, Subtraction, Multiplication, and Division of Real Numbers
 - 2. Properties of Real Numbers
 - 3. Simplifying Expressions Using Order of Operations

- F. Solving Linear Equations (4 hours)
 - 1. Solving Equations Using the Addition and Multiplication Principle
 - 2. Solving Equations Using Both the Addition and Multiplication Principle Together

- G. Cumulative Review Session (1 hour)

- H. Practice Test for the Final (1 hour)

- I. Final Exam (2 hours)

IV. Evaluation Methods

The grading criteria are as follows:

10% Class Participation--- Students will be asked to participate in a variety of classroom activities. Students will be encouraged to answer questions as well as ask questions to reinforce their learning.

20% Homework---Homework will be assigned from each objective to emphasize learning.

10% Class Attendance--- This attendance grade is assigned to promote class attendance.

10% Quizzes---Quizzes will be administered throughout the course to provide feedback to the instructor and students in order to evaluate learning outcomes. Writing assignments will be included to increase students' math language proficiency.

10% Note Taking---Class notes will be collected and graded according to the directions given at the beginning of a semester.

20% Two Exams--- Students will be made aware in advance of exam topics.

20% Final Exam--- This is a cumulative exam that will include all material covered during the course.

V. Example Grading Scale

90% - 100% = A

80% - 89% = B

70% - 79% = C

60% - 69% = D

Below 60% = F

VI. Undergraduate Course Attendance Policy

Attendance is required and will contribute 10% of the course grade. Students may have two unexcused absences without penalty. Excused absences include personal illness or major life crisis.

VII. Required Textbook

Bittinger, M.L. & Beecher, J.A. (2011). *Developmental Mathematics Package, Indiana University of Pennsylvania*. 1/e. New York: Pearson Addison-Wesley.

VIII. Special Resources Requirements: Students are expected to purchase the required textbook and access code for Math Lab to work on their online assignments.

IX. Bibliography

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- McKeachie, W. J. (2002). *Teaching tips: Strategies, research, and theory for college and university instructors*. Boston, MA: Houghton Mifflin Company.
- Rehberger, D. Y. (2009). A curriculum focus intervention's effects on prealgebra achievement. *Journal of Developmental Studies*, 33(2), 26-36.
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- Tong, J. A. (2009). Integrating math with writing. *NADE Digest*, 4(2), 9-18.

OLD LRNC 091 Syllabus of Record**I. Catalog Description**

LRNC 091 Developmental Mathematics, Arithmetic Operations	1 class hour
	0 lab hour
	1 semester hour
	(1c-0l-1sh)

Prerequisite: A student may not register for this course after successfully completing any course offered by the mathematics department without written approval of the Learning Enhancement Center Director.

Explores the basics of counting principles, place value, arithmetic operations, exponential notation, and fractional notation through a base 8 perspective. Vocabulary, concept development, and algorithms related to the above topics will be presented in a lecture format. Supplemental Instruction will be provided with this course. Carries Institutional, non-degree credit and attendance is required.

II. Course Objectives

Students will be able to:

1. Develop counting principles and place values of multi-digit numbers in a base 8 format and relate those concepts to their counterparts in traditional base 10 systems.
2. Add, subtract, multiply and divide real numbers in a base 8 format and relate the algorithms to their base 10 counterparts.
3. Develop and use algorithms for operations involving base 8 fractions and relate the algorithms to their base 10 counterparts.
4. Develop and use algorithms for exponential notation involving base 8 numeration and relate the algorithms to their base 10 counterparts.
5. Demonstrate competency with vocabulary introduced and defined during lectures through quizzes and exams.

III. Course Outline

- A. Exploration and comparison of counting, addition, subtraction and conversion algorithms of base 8 and base 10 whole numbers (5 hours).
 1. Definitions for the vocabulary of the mathematics encountered.
 2. Counting and place value.
 3. Converting values between base systems.

4. Addition algorithms, base 8 and base 10.
5. Subtraction algorithms, base 8 and base 10.

Exam 1 (1 hour)

B. Multiplication (3 hours).

1. Definitions for the vocabulary of the mathematics encountered.
2. Exponential notation and simplification algorithms.
3. Multiplication.

Exam 2 (1 hour)

C. Division (4 hours).

1. Definitions for the vocabulary of the mathematics encountered.
2. Fractional notation and simplification algorithms.
3. Division.

Exam 3 (Final Exam)

IV. Evaluation Methods

Final letter grades will be determined by converting each student's accumulation of points to a rounded percentage of possible points. The grading scale will be: accumulated points $\geq 90\%$ = A, 89% - 80% = B, 79% - 70% = C, 69% - 60% = D, 59% - 0% = F. Approximate percentages of points follow for each category:

60% Exams – Three cumulative exams will be presented during the course. One hour will be allotted to complete each exam. Students will be required to demonstrate their ability to use algorithms presented through lectures and provide correct answers to receive full credit for each problem. Associated vocabulary will be included as a component of each exam. The third exam will be considered the culminating activity.

10% Homework – Students will be expected to synthesize problems beyond the classroom experience related to examples given during the lecture. Assistance developing such problems will be available through Supplemental Instruction on a daily basis. Additional example problems will be available through a collection of texts available during SI and Homework Helper sessions at the Learning Enhancement Center.

10% Quizzes – Quizzes will be administered throughout the course to provide feedback to the instructor and student as to the level of understanding attained from recent lectures. Writing assignments will be included to encourage ongoing development of an adequate vocabulary for the Mathematics studied.

10% Class attendance – Each absence will result in a deduction of points, typically 15 points, from the total points designated, typically 45 points, for this category. Students with perfect attendance will be rewarded with bonus points, typically 15 points.

10% Note Taking – A modified form of the Cornell method for taking notes will be presented to students at the beginning of the course. Notes will be collected and graded according to the direction given on a weekly basis.

Supplemental Instruction (SI) – SI sessions will be offered during the course but will not carry direct course credit.

V. **Example Grading Scale**

A total of 400 points will be offered. Points may be accumulated to determine grades as follows:

Exam 1	50 points maximum	A:	400-360
Exam 2	75 points maximum	B:	359-320
Exam 3 (Final)	100 points maximum	C:	319-280
Attendance	45 points maximum (-15 points / absence)	D:	279-240
Quizzes	50 points maximum	F:	239-0
Notes	40 points maximum		
Homework	40 points maximum		

VI. **Undergraduate Course Attendance Policy**

Attendance is required and will contribute to points accumulated for grades (See above).

VII. **Required Textbook(s), Supplemental Books and Readings**

None (See A1.).

VIII. **Special Resource Requirements**

None.

IX. **Bibliography**

Bittinger, M. L., & Beecher, J. A. (2000). Developmental mathematics (5th ed.). New York: Addison-Wesley.

Brooks, J. G., & Brooks, M. G. (1993). The case for constructivist classrooms. Alexandria, Virginia: The Association for Supervision and Curriculum Development.

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- Oxrieder, C. A., & Ray, J. P. (1987). Your number's up: A calculated approach to successful math study. Reading, Massachusetts: Addison-Wesley.
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- Tobias, S. (1987). Succeed with math: Every student's guide to conquering math anxiety. New York: The College Board.
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- Whimbey, A., & Lochhead, J. (1986). Problem solving and comprehension (4th ed.). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Wright, D. J. (Ed.). (1987). Responding to the needs of today's minority students. San Francisco: Jossey-Bass, Inc.

Course Analysis Questionnaire

A. Details of the course

- A1. The Learning Enhancement Center program is designed to take students from “where they are” and lead them through courses, advisement, and activities to “where they need to be” in order to become successful college students. This course, one of three to be proposed in lieu of LRNC 095 placement on the main campus, is designed to prepare students for entry level Math courses. The three courses being proposed, in conjunction with Supplemental Instruction (SI) will replace LRNC 095 on the main campus. Since Supplemental Instruction is not available on the branch campuses, LRNC 095 will remain in effect for instruction on branch campuses. This set of proposals will focus the mathematics content from LRNC 095 into three one-credit courses and include a Supplemental Instruction component. As a Developmental course, mastery of content is not the only goal. Behavioral changes linked to course requirements will enable the student to better adapt to college expectations. Examples of such requirements include mandatory attendance, content delivered through lecture rather than a text, expectations concerning note taking, unique homework assignments, and the development of associated math vocabulary. The Learning Enhancement Center Program has a math component, and this course is one part of that component. In addition to courses, Supplemental Instruction and Tutorial services complete the LEC Math component. Extremely low scores on the Basic Algebra Placement exam administered prior to registration for the freshman year would identify students to be placed into this course. From experience, observation, and research we have found that scores ranging from 0 through 4 indicate a need for such a course of study, a review of basic arithmetic concepts and algorithms. Using base 8 numerations as the core of the learning process circumvents numerous problems associated with a more typical remedial arithmetic course. A typical remedial approach to the needs of these students provides a review of algorithms in a demeaning manner. We feel that providing this course as a separate one-credit course targets students needing the instruction and permits those already competent with its content to avoid unnecessary credits. This streamlined approach better utilizes both student and University resources.
- A2. No, there should be no need to change content of other courses nor the requirements for a program.
- A3. The course has been offered during the fall semester of 2001, the spring semester of 2002, and the fall semester of 2002. Four sections of LRNC 091 (listed as LRNC 081 Level 1) were offered each semester. Approximately 170 students were enrolled in the course.
- A4. LRNC 091 is not a dual-level course.
- A5. This course is not to be taken for variable credit.
- A6. Similar courses are offered at the following institutions, among others: Clarion University of PA, West Chester University of PA, Georgia Southern University, Southeastern Louisiana University, Mississippi State University, Appalachian State University, Bowling

Green State University, Sam Houston University, Stephen F. Austin State University, and Washington State University.

- A7. No professional society, accrediting authority, law, or other external agency recommends or requires the content or skills of this proposed course.

B. Interdisciplinary Implications

- B1. This course will be taught by one instructor.
- B2. This course is designed to prepare students for entry level Math courses. The LRNC 091 course reviews arithmetic algorithms and concepts with an appropriate Developmental approach that concurrently develops behavioral changes appropriate to college study. The content of this course is expected to be mastered prior to entry into higher-level math courses.
- B3. This course will not be cross-listed with other departments.
- B4. Seats have always been made available to students in the School of Continuing Education and will continue to be provided on referral, as seats are available.

C. Implementation

- C1. The faculty member currently teaching LRNC 095 at the Indiana campus is expected to continue with the same load, twenty-four credits of teaching load per academic year. The LRNC 095 course will not be offered during the regular semesters at the Indiana campus but will be continued at other locations. Approximately 4 sections of LRNC 091, 4 sections of LRNC 092, and 4 sections of LRNC 093 will be offered each fall and spring semester. Adjustments to the number of sections for each level will be determined by student need for each course after placement testing in the summer and implemented in the spring semester. For example, if more students need the LRNC 092 course in the spring and less need LRNC 091 or LRNC 093 instruction, the number of sections of LRNC 092 could be increased commensurate with a decrease in LRNC 091 or LRNC 093 sections.
- C2. Other resources:
- a. Adjustments have been made that make current space allocations adequate.
 - b. No additional special equipment is needed for this course.
 - c. No additional laboratory supplies are necessary for this course.
 - d. Library holdings are adequate.
 - e. No travel funds are needed for this course.
- C3. Part of the salary for the faculty member teaching this course is funded through an Act 101 grant which is expected to be continued.
- C4. We expect to offer this course in the fall semester and in the spring semester. This course is not designed for or restricted to seasonal semesters.

- C5. An average of four sections each semester is expected to be offered.
- C6. We expect to accommodate up to 20 students per section for this course.
- C7. To the best of my knowledge, no professional society recommends enrollment limits or parameters for a course of this nature.
- C8. This is not intended to be a distance education course.

D. Miscellaneous

No additional information is necessary.

I.

Catalog Description

LRNC 092 Developmental Mathematics, Elemental Topics	1 class hour
	0 lab hour
	1 semester hour
	(1c-0l-1sh)

Prerequisite: A student may not register for this course after successfully completing any course offered by the mathematics department without written approval of the Learning Enhancement Center Director.

Provides students with minimal algebra skills prior to introducing basic probability and descriptive statistics concepts as well as a review of basic geometry concepts and algorithms. Topics include: identification and simplification of terms and expressions; mean, median, mode calculations; bar, line and circle graph construction and interpretation; application and calculation of plane geometry formulae. Carries Institutional, non-degree credit and attendance is required.

II. **Course Objectives**

Students will be able to:

1. Demonstrate competency with vocabulary introduced and defined during lectures through quizzes and exams.
2. Identify and construct algebraic terms and expressions.
3. Combine like terms within an algebraic expression.
4. Add and subtract algebraic expressions.
5. Create examples and calculate the mean, median, and mode of simplistic statistical situations.
6. Appropriately construct and interpret Bar, Line and Circle graphs.
7. Identify and construct geometric shapes.
8. Calculate perimeter, area, surface area, and volume of geometric shapes as appropriate.

III. **Course Outline**

- D. Introduction to real numbers and algebraic expressions (5 hours).

6. Definitions for the vocabulary of the mathematics encountered.
7. An introduction to the real number system.
8. Operations on real numbers.
9. Absolute value.
10. Interpreting algebraic expressions.
11. Using the order of operations rules to simplify expressions.

Exam 1 (1 hour)

E. Problems from Geometry (4 hours).

4. Definitions for the vocabulary of the mathematics encountered.
5. Basic geometric figures and formulae for distance, area, and volume.

Exam 2 (1 hour)

F. Introduction to Descriptive Statistics (3 hours).

4. Definitions for the vocabulary of the mathematics encountered.
5. Calculating and interpreting mean, median, and mode.
6. Constructing bar, line, and circle graphs.

Exam 3 (Final Exam)

IV. Evaluation Methods

Final letter grades will be determined by converting each student's accumulation of points to a rounded percentage of possible points. The grading scale will be: accumulated points $\geq 90\%$ = A, $89\% - 80\%$ = B, $79\% - 70\%$ = C, $69\% - 60\%$ = D, $59\% - 0\%$ = F. Approximate percentages of points follow for each category:

60% Exams – Three cumulative exams will be presented during the course. One hour will be allotted to complete each exam. Students will be required to demonstrate their ability to use algorithms presented through lectures and provide correct answers to receive full credit for each problem. Associated vocabulary will be included as a component of each exam. The third exam will be considered the culminating activity.

10% Homework – Students will be expected to synthesize problems beyond the classroom experience related to examples given during the lecture. Assistance developing such problems will be available through Supplemental Instruction on a daily basis. Additional example problems will be available through a collection of texts available during SI and Homework Helper sessions at the Learning Enhancement Center.

10% Quizzes – Quizzes will be administered throughout the course to provide feedback to the instructor and student as to the level of understanding attained from recent lectures. Writing assignments will be included to encourage ongoing development of an adequate vocabulary for the Mathematics studied.

10% Class attendance – Each absence will result in a deduction of points, typically 15 points, from the total points designated, typically 45 points, for this category. Students with perfect attendance will be rewarded with bonus points, typically 15 points.

10% Note Taking – A modified form of the Cornell method for taking notes will be presented to students at the beginning of the course. Notes will be collected and graded according to the direction given on a weekly basis.

Supplemental instruction (SI) – SI sessions will be offered during the course but will not carry direct course credit.

V. **Example Grading Scale**

A total of 400 points can be accumulated. Points may be accumulated to determine grades as follows:

Exam 1	50 points maximum	A:	400-360
Exam 2	75 points maximum	B:	359-320
Exam 3 (Final)	100 points maximum	C:	319-280
Attendance	45 points maximum (-15 points / absence)	D:	279-240
Quizzes	50 points maximum	F:	239-0
Notes	40 points maximum		
Homework	40 points maximum		

VI. **Undergraduate Course Attendance Policy**

Attendance is required and will contribute to points accumulated for grades (See above).

VII. **Required Textbook(s), Supplemental Books and Readings**

None (See A1.).

VIII. **Special Resource Requirements**

None.

IX. **Bibliography**

Bittinger, M. L., & Beecher, J. A. (2000). Developmental mathematics (5th ed.). New York: Addison-Wesley.

Brooks, J. G., & Brooks, M. G. (1993). The case for constructivist classrooms. Alexandria, Virginia: The Association for Supervision and Curriculum Development.

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- Smith, R. M. (1998). Mastering mathematics: How to be a great math student (3rd ed.). New York: Brooks/Cole Publishing Company.
- Tobias, S. (1987). Succeed with math: Every student's guide to conquering math anxiety. New York: The College Board.
- Tomlinson, L. M. (1989). Postsecondary developmental programs: A traditional agenda with new imperatives (ASHE-ERIC Higher Education Report No. 3). Washington, D.C.: The George Washington University, School of Education and Human Development.
- Upcraft, M. L., Gardner, J. N., & Associates. (1989). The freshman year experience: Helping students survive and succeed in college. San Francisco: Jossey-Bass Publishers.
- Whimbey, A., & Lochhead, J. (1986). Problem solving and comprehension (4th ed.). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Wright, D. J. (Ed.). (1987). Responding to the needs of today's minority students. San Francisco: Jossey-Bass, Inc.

Course Analysis Questionnaire

Section A: Details of the course

- A1 This course, one of three to be proposed in lieu of LRNC 095 placement on the main campus, is designed to prepare students for entry level Math courses by investigating very basic attributes of geometry, statistics, and algebra. This course is designed for Learning Enhancement Center admits with Basic Algebra placement scores < 8 . The design of LRNC 092 encompasses perceived needs for students expected to enter math courses such as MATH 100 Intermediate Algebra, MATH 101 Foundations of Mathematics, and MATH 217 Probability and Statistics. The three courses being proposed, in conjunction with Supplemental Instruction (SI) will replace LRNC 095 on the main campus. Since Supplemental Instruction is not available on the branch campuses, LRNC 095 will remain in effect for instruction on branch campuses. This set of proposals will focus the mathematics content from LRNC 095 into three one-credit courses and include a Supplemental Instruction component.
- A2 No, there should be no need to change content of other courses nor the requirements for a program.
- A3 The course has been offered during the fall semester of 2001, the spring semester of 2002, and the fall semester of 2002. Four sections of LRNC 092 (listed as LRNC 081 Level 2) were offered each semester. Approximately 210 students were enrolled in the course.
- A4 LRNC 092 is not a dual-level course.
- A5 This course is not to be taken for variable credit.
- A6 Similar courses are offered at the following institutions, among others: Clarion University of PA, West Chester University of PA, Georgia Southern University, Southeastern Louisiana University, Mississippi State University, Appalachian State University, Bowling Green State University, Sam Houston University, Stephen F. Austin State University, and Washington State University.
- A7 No professional society, accrediting authority, law, or other external agency recommends or requires the content or skills of this proposed course.

Section B: Interdisciplinary Implications.

- B1 This course will be taught by one instructor.
- B2 This course is designed to prepare students for entry level Math courses by investigating very basic attributes of geometry, statistics, and algebra. An additional course will be proposed to extend and enhance student knowledge and skills associated with algebra.

- B3 This course will not be cross-listed with other departments.
- B4 Seats have always been made available to students in the School of Continuing Education and will continue to be provided on referral, as seats are available.

Section C: Implementation.

- C1 The faculty member currently teaching LRNC 095 is expected to continue with the same load, twenty-four credits of teaching load per academic year. The LRNC 095 course will not be offered during the regular semesters at the Indiana campus. Approximately 4 sections of LRNC 091, 4 sections of LRNC 092, and 4 sections of LRNC 093 will be offered each fall and spring semester. Adjustments to the number of sections for each level will be determined by student need for each course after placement testing in the summer and implemented in the spring semester. For example, more students may need the LRNC 092 course in the spring and less need LRNC 091 or LRNC 093 instruction. The number of sections of LRNC 092 could be increased commensurate with a decrease in LRNC 091 or LRNC 093 sections.
- C2 Other resources:
- a. Adjustments have been made that make current space allocations adequate.
 - b. No additional special equipment is needed for this course.
 - c. No additional laboratory supplies are necessary for this course.
 - d. Library holdings are adequate.
 - e. No travel funds are needed for this course.
- C3 Part of the salary for the faculty member teaching this course is funded through an Act 101 grant which is expected to be continued.
- C4 We expect to offer this course in the fall semester and in the spring semester. This course is not designed for or restricted to seasonal semesters.
- C5 Probably not more than four sections will be offered during any semester.
- C6 We expect to accommodate up to 20 students per section for this course.
- C7 To the best of my knowledge, no professional society recommends enrollment limits or parameters for a course of this nature.
- C8 This is not intended to be a distance education course.

D. Miscellaneous

No additional information is necessary.