

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
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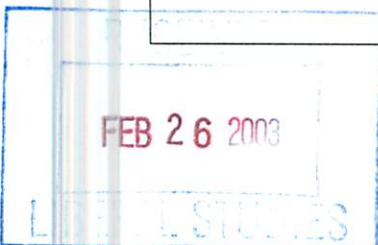
**Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee**

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

<b>1. Course Proposals (check all that apply)</b>		
<input checked="" type="checkbox"/> New Course	<input type="checkbox"/> Course Prefix Change	<input type="checkbox"/> Course Deletion
<input type="checkbox"/> Course Revision	<input type="checkbox"/> Course Number and/or Title Change	<input type="checkbox"/> Catalog Description Change
		LRNC 092 Developmental Mathematics, Elemental Topics
<u>Current Course prefix, number and full title</u>		<u>Proposed course prefix, number and full title, if changing</u>
<b>2. Additional Course Designations: check if appropriate</b>		
<input type="checkbox"/> This course is also proposed as a Liberal Studies Course.	<input type="checkbox"/> Other: (e.g., Women's Studies, Pan-African)	
<input type="checkbox"/> This course is also proposed as an Honors College Course.		
<b>3. Program Proposals</b>		
<input type="checkbox"/> New Degree Program	<input type="checkbox"/> Program Title Change	<input type="checkbox"/> Program Revision
<input type="checkbox"/> New Minor Program	<input type="checkbox"/> New Track	<input type="checkbox"/> Other
<u>Current program name</u>		<u>Proposed program name, if changing</u>
<b>4. Approvals</b>		
Department Curriculum Committee Chair(s)	<i>Tracey R. Weinstein</i>	Date 2/7/03
Department Chair(s)	<i>Conny Conroy</i>	2/12/03
College Curriculum Committee Chair	<i>Rhonda H. Leuler</i>	2/24/03
College Dean	<i>Harold Goldsmith/rhe</i>	2/24/03
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs	<i>Gail S. Seehurst</i>	3/18/03

\* where applicable



## **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**

- A. Introduction to real numbers and algebraic expressions (5 hours).
1. Definitions for the vocabulary of the mathematics encountered.
  2. An introduction to the real number system.

3. Operations on real numbers.
4. Absolute value.
5. Interpreting algebraic expressions.
6. Using the order of operations rules to simplify expressions.

Exam 1 (1 hour)

B. Problems from Geometry (4 hours).

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

Exam 2 (1 hour)

C. Introduction to Descriptive Statistics (3 hours).

1. Definitions for the vocabulary of the mathematics encountered.
2. Calculating and interpreting mean, median, and mode.
3. 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**

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## 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.