

10-17a.

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Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Dr. Parveen J. Ali	Email Address pali@iup.edu
Proposing Department/Unit Department of 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 095: Introduction to College Math II

<u>Current Course prefix, number and full title</u>	<u>Proposed course prefix, number and full title, if changing</u>
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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

<u>Current program name</u>	<u>Proposed program name, if changing</u>
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4. Approvals		Date
Department Curriculum Committee Chair(s)	<i>Susan A. Dawson</i>	1/23/10
Department Chair(s)	<i>C. Carranza</i>	1/27/10
College Curriculum Committee Chair	<i>Roger Buscoe</i>	3/2/10
College Dean	<i>Mary Ann Rafath</i>	3-3-10
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs	<i>Gail Sedquist</i>	9-1-10

* where applicable

Received
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 SEP 1 2010
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Rationale for Course Revision

1. New Syllabus of Record (attached).

2. Summary of Revisions

The following revisions have been made to this course:

- Establishment of a syllabus of record
- Change in the catalog description
- Change to the course objectives

3. Rationale for Revision

The main purpose of this course revision is to establish a syllabus of record for DVST 095. The course pre-dates the syllabus of record concept. In establishing the syllabus of record, the catalog description and course objectives needed to be updated. This newly established syllabus of record is for the traditional classroom. Because this is an existing course, this syllabus of record will then be used to propose delivery of DVST 095 online.

4. Old Syllabus of Record

This course pre-dates the syllabus of record concept. There is no established syllabus of record for the course.

COURSE REVISION

I. Catalog Description

DVST 095 Introduction to College Math II

3c-01-3cr

Prerequisite: May not be taken after successfully completing any course offered by the Mathematics Department, without written approval of the Department of Developmental Studies chairperson.

Designed for students who need to develop the basic mathematical skills that are essential to success in more advanced college level work. Content material includes computational skills of whole numbers, fractions, percents, data analysis, graphs, statistics, properties and operations on real numbers, simplifying algebraic expressions, and solving equations and inequalities. Carries institutional non-degree credit.

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 completing this course, students should be able to:

1. Describe and demonstrate knowledge of operations on whole numbers.
2. Perform different operations on fractions and solve application problems on fractions.
3. Write a percent as a fraction or decimal and vice versa and solve application problems on percents.
4. Create examples and calculate the mean, median, and mode.
5. Appropriately construct and interpret bar, line, and circle graphs.
6. Simplify and evaluate algebraic expressions and translate phrases to algebraic expressions.
7. Add, subtract, multiply, divide, and solve application problems involving real numbers.
8. Solve linear equations and inequalities.

III. Course Outline

A. Whole Numbers (5 hours)

1. Application and Problem Solving on Whole Numbers
2. Exponential Notation and Order of Operations
3. Factorizations
4. Least Common Multiples

Quiz 1 (1 hour)

B. Fractions (7 hours)

1. Fractional Notation and Simplifying
2. Multiplication and Division
3. Addition and Subtraction
4. Applications and Problem Solving
5. Order of Operations

Quiz 2 (1 hour)

- C. Percents (6 hours)
 - 1. Ratio and Proportion
 - 2. Percent and Fraction Notation
 - 3. Solving Percent Problems Using Percent Equations
 - 4. Sales Tax, Commission, Discount, and Interest

Mid-Term (1 hour)

- D. Data Analysis, Graphs, and Statistics (4 Hours)
 - 1. Mean, Median, and Mode
 - 2. Bar, Line, and Circle Graphs

Quiz 4 (1 hour)

- E. Introduction to Real Numbers and Algebraic Expressions (6 hours)
 - 1. Addition, Subtraction, Multiplication, and Division of Real Numbers
 - 2. Properties of Real Numbers
 - 3. Simplifying Expressions Using Order of Operations

Quiz (1 hour)

- F. Solving Linear Equations and Inequalities (6 hours)
 - 1. Solving Equations Using the Addition and Multiplication Principle
 - 2. Solving Equations Using Both the Addition and Multiplication Principle Together
 - 3. Solving Formulas
 - 4. Solving Inequality Statements
 - 5. Applications and Problem Solving

Quiz 5 (1 hour)

G. Cumulative Review Session (1 hour)

H. Group 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 exercises. Students will be encouraged to answer questions as well as ask questions to reinforce their learning.

10% Homework—Homework will be assigned from each objective to emphasize learning. Students will get additional assistance for their homework and classwork through Supplemental Instruction (e.g., peer tutoring sessions or instructor tutoring).

10% Chapter Reflection--- Students will be assigned to write a short reflective paper, at least one page in length, at the completion of each chapter. In this paper they will discuss about the concepts they have learned from the chapter and their strengths and weaknesses.

30% Quizzes—Five quizzes will be administered throughout the course to provide feedback to the instructor and students for learning outcome.

10% Class Attendance—This attendance grade will be assigned to students to promote class attendance.

10% Mid-Term Exam—This will be a cumulative exam that will be administered at the end of sixth week. Students will be made aware in advanced topics to be presented on the exam.

20% Final Exam—This is a cumulative exam that will include all materials covered during the course. The final exam will be held according to the University finals schedule.

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 course grade.

VII. Required Textbook

Bittinger, M.L. & Beecher, J.A. (2007). *Developmental Mathematics* (7th ed.). Pearson Addison-Wesley.

VIII. Special Resources Requirements

None

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