CSKLS367.1 Course Outline as of Fall 2014

CATALOG INFORMATION

Dept and Nbr: CSKLS367.1 Title: BASIC MATH REVIEW 1
Full Title: Basic Math Review 1
Last Reviewed: 11/25/2019

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	0	17.5	Lecture Scheduled	0
Minimum	1.00	Lab Scheduled	3.00	4	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00 Total Student Learning Hours: 52.50

Title 5 Category:	AA Degree Non-Applicable
Grading:	P/NP Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	CSKLS 367A

Catalog Description:
Guided independent study of topics ranging from basic arithmetic through pre-algebra using diagnostic-based software to allow students to progress from their current levels of competency. Students can build math skills in specific areas to prepare for desired math courses, occupational requirements, and math placement tests.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Guided independent study of topics ranging from basic arithmetic through pre-algebra using diagnostic-based software to allow students to progress from their current levels of competency. Students can build math skills in specific areas to prepare for desired math courses, occupational requirements, and math placement tests. (P/NP Only)
Prerequisites/Corequisites:

Recommended:
Limits on Enrollment:
Transfer Credit:
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Effective:	Inactive:
UC Transfer:	Effective:	Inactive:

CID:

Certificate/Major Applicable:
Not Certificate/Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Master arithmetic and math skills designated by initial diagnostic and apply in academic, workplace, and personal situations.
2. Use math learning strategies independently.
3. Use personalized learning objectives and goals in math based on assessment and self-analysis.
4. Demonstrate greater ability and confidence to develop and proceed toward future math goals.

Objectives:
Based on initial assessment, students will be assigned individual programs of study. Upon completion of this course, students will be able to achieve some or all of the following objectives, as assigned by the instructor:
1. Apply basic operations of addition, subtraction, multiplication, and division to whole numbers, fractions, mixed numbers, and decimals;
2. Apply basic operations to signed numbers and algebraic expressions;
3. Represent a number in its equivalent decimal, fraction, percent, scientific notation;
4. Interpret data from basic graphs, charts, and tables;
5. Use tables of equivalents to convert units of English and metric measurements;
6. Identify basic math language and translate into numerals and symbols;
7. Use rounding and estimating to solve word problems and verify answers;
8. Interpret and apply strategies to solve basic word problems containing whole numbers, fractions, decimals, percents, and signed numbers;
9. Set up and solve basic linear and proportional equations;
10. Apply formulas for perimeter, area, and volume of regular and irregular shapes to solve measurement problems;
11. Apply order of operations when solving math problems.

Topics and Scope:

Based on initial diagnostic, students will cover some or all of topics I-XI below.

I. Whole numbers
- A. Place value and terminology
- B. Expanded form and standard notation
- C. Rounding and estimating whole numbers
- D. Four operations with whole numbers, including the language of expressing addition, subtraction, multiplication, and division
- E. Mean, median, mode
- F. Word problems, charts, graphs, and tables with whole numbers.

II. Fractions
- A. Fraction terminology
- B. Equivalent fractions; reducing and building fractions
- C. Four operations with fractions and mixed numbers
- D. Prime factors, prime factorization, multiples
- E. Word problems with fractions

III. Decimals
- A. Place value and terminology of decimal fractions
- B. Rounding decimals
- C. Conversions between decimals and fractions
- D. Comparing and ordering decimals
- E. Four operations with decimals
- F. Word problems, charts, graphs, and tables with decimals

IV. Ratio and proportion
- A. Setting up and solving proportions
- B. Unit rate
- C. Word problems with ratio and proportion

V. Percents
- A. Conversions between decimals, fractions, and percents
- B. Setting up percent problems: finding whole, part, and percent
- C. Word problems with percents

VI. Measurement
- A. Converting units of English and metric measurements
- B. Four operations, as applied to units of measurement

VII. Signed numbers
- A. Reading a number line with rational numbers, absolute value and relative size of numbers
- B. Four operations with signed integers, fractions, and decimals
- C. Word problems with signed numbers

VIII. Exponents
- A. Simplifying exponential expressions, using rules of exponents
- B. Scientific notation
- C. Word problems

IX. Geometry measurement
- A. Perimeter, area, and volume of regular and irregular shapes
- B. Manipulating formulae

X. Algebraic expressions
- A. Algebraic terminology
- B. Simplifying algebraic expressions

XI. Equations
- A. Solving linear equations

B. Algebraic word problems
XII. Using assessment and self-analysis to set personal goals relating to math.

Assignment:

1. Software-generated problems on topics as assigned by the instructor to meet individualized objectives.
2. Written self-assessments.
3. Six to eight quizzes and one to two tests.
4. Written responses to questions assigned by instructor.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Self-assessments; responses to questions	Writing 10 - 20%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Software-generated problems	Problem solving 35 - 50%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None	Skill Demonstrations 0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes and tests: multiple choice, completion, short answer	Exams 30 - 50%

Other: Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation	Other Category 5 - 10%

Representative Textbooks and Materials:
Instructor-prepared materials
ALEKS (Assessment and Learning in Knowledge Spaces): McGraw-Hill Higher Education, 2013 or most recent version (online mathematics tutorial program, updated annually)