CSKLS367.2 Course Outline as of Fall 2014

CATALOG INFORMATION

Dept and Nbr: CSKLS367.2 Title: BASIC MATH REVIEW 2
Full Title: Basic Math Review 2
Last Reviewed: 4/14/2014

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 367B

Catalog Description:
Students will continue a guided independent study of topics ranging from advanced arithmetic through beginning algebra, as determined by instructor and diagnostic-based software. Student will build math skills in specific areas to prepare for desired math course, occupational requirements, and math placement tests.

Prerequisites/Corequisites:

Recommended Preparation:
Completion of CSKLS 367.1 or 367A or equivalent

Limits on Enrollment:

Schedule of Classes Information:
Description: Students will continue a guided independent study of topics ranging from advanced arithmetic through beginning algebra, as determined by instructor and diagnostic-based software. Student will build math skills in specific areas to prepare for desired math course, occupational requirements, and math placement tests. (P/NP Only)
Prerequisites/Corequisites:

Recommended: Completion of CSKLS 367.1 or 367A or equivalent
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:
1. Master math skills to the appropriate level, as diagnosed in initial assessment, and apply to academic, workplace, and personal situations.
2. Use independent learning skills to improve math competency.
3. Use personalized learning objectives and goals in math based on assessment and self-analysis.
4. Demonstrate improved confidence and ability necessary to achieve 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 addition, subtraction, multiplication, division, and exponential operations to rational numbers;
2. Apply addition, subtraction, multiplication, division, and exponential operations to polynomials;
3. Represent a rational number in its equivalent decimal, fraction, percent, and/or scientific notation form;
4. Interpret data from basic graphs, charts, and tables;
5. Use tables of equivalents to convert units of English (U.S.) and metric measurements;
6. Translate basic math phrases and sentences into algebraic expressions and equations;
7. Set up and solve basic linear and proportional equations;
8. Use number logic to solve multi-step word problems and verify answers;
9. Use proportions and algebraic equations to solve word problems that require one to two steps (operations) and involve percents, measurement, rates, and/or geometric properties;
10. Apply formulae for perimeter, area, and volume of regular and irregular shapes to solve geometric problems;
11. Apply order of operations to simplify arithmetic and algebraic expressions involving addition, subtraction, multiplication, division, and exponents.

Topics and Scope:

Based on initial diagnostic, students will cover some or all of the topics below.

I. 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

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

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

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

V. 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

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

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

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

IX. Equations
- A. Solving linear equations
- B. Algebraic word problems

X. Using assessment and self-analysis as basis for 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)3.0: McGraw-Hill Higher Education, 2013 or current version (online mathematics tutorial program, updated annually)