CSKLS 722 Course Outline as of Fall 2024

CATALOG INFORMATION

Dept and Nbr: CSKLS 722 Title: WORKPLACE ARITH--PT 2

Full Title: Workplace Arithmetic--Part 2

Last Reviewed: 10/24/2022

Units		Course Hours per Weel	k Nt	or of Weeks	Course Hours Total	
Maximum	0	Lecture Scheduled	0	9	Lecture Scheduled	0
Minimum	0	Lab Scheduled	2.00	3	Lab Scheduled	18.00
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	18.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00 Total Student Learning Hours: 18.00

Title 5 Category: Non-Credit

Grading: Non-Credit Course

Repeatability: 27 - Exempt From Repeat Provisions

Also Listed As:

Formerly: ADLTED 722

Catalog Description:

Students will apply math concepts and problem-solving strategies to specific trades and industries. Skill areas to be covered include decimals, fractions, percents, systems of measurements, geometry, charts, tables, and graphs.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:

Description: Students will apply math concepts and problem-solving strategies to specific trades and industries. Skill areas to be covered include decimals, fractions, percents, systems of measurements, geometry, charts, tables, and graphs. (Non-Credit Course)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Exempt From Repeat Provisions

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:

Certificate Applicable Course

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

- 1. Apply understanding of decimals, fractions, percents, measurement conversions, and geometry as they relate to problem solving and calculations in the workplace.
- 2. Interpret data from charts, graphs, and tables as they relate to specific workplaces.

Objectives:

At the conclusion of this course, the student should be able to:

- 1. Perform arithmetic computations involving decimals and fractions as they relate to the workplace.
- 2. Compute proportions and percent problems used in a specific workplace.
- 3. Define vocabulary and use basic concepts relating to measurement in both English (U.S.) and metric systems.
- 4. Apply basic principles of geometry as they relate to a specific work situation.
- 5. Interpret basic representation of data from graphs, tables, and charts.
- 6. Use appropriate technology in the process of making computations in the workplace.

Topics and Scope:

- I. Decimals and Fractions
 - A. Conversions between decimals and fractions
 - B. Word problems with decimals and fractions
- II. Percents and Proportions
 - A. Conversions between decimals, fractions, and percents
 - B. Solving proportions
 - C. Word problems with percents and proportions
- III. Systems of Measurements
 - A. English (U.S.) System
 - B. Metric System
 - C. Conversions between English (U.S.) and metric systems

- D. Word problems with systems of measurements
- IV. Basic Principles of Geometry
 - A. Perimeter and area of regular and irregular shapes
 - B. Volume
 - C. Angles
- V. Graphs, Charts, and Tables
- VI. Problem Solving Strategies Appropriate to Field
- VII. Use of Electronic and Web Sources to Help Solve Workplace Problems

Assignment:

- 1. Computational problems in arithmetic topics
- 2. Word problems using arithmetic topics
- 3. Application assignments and optional skill demonstrations that relate general arithmetic skills to the workplace
- 4. Quiz(zes) (1-3)

None

5. Final assessment (1)

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.

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

computational problem solving skills.

Computational problems; word problems; application assignments

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

Application assignments and optional skill demonstrations

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

Quiz(zes); final assessment

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

Attendance and class participation

Problem solving 30 - 50%

Writing

0 - 0%

Skill Demonstrations 30 - 50%

Exams 10 - 30%

Other Category 10 - 20%

Representative Textbooks and Materials:

Visual Literacy. Tables and Graphs. 2nd ed. New Readers Press. 2014 (classic)

Mastering Workplace Skills: Math Fundamentals. Learning Express. 2015 (classic) Breakthrough to Math. 2nd ed. Grass Roots Press. 2014 (classic) Instructor prepared materials