

**CSKLS 722 Course Outline as of Fall 2023****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 Week		Nbr 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:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**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)
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.

None	Writing 0 - 0%
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**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Computational problems; word problems; application assignments	Problem solving 30 - 50%
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**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Application assignments and optional skill demonstrations	Skill Demonstrations 30 - 50%
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**Exams:** All forms of formal testing, other than skill performance exams.

Quiz(zes); final assessment	Exams 10 - 30%
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**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and class participation	Other Category 10 - 20%
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### 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