

**ADLTED 722 Course Outline as of Spring 2021****CATALOG INFORMATION**

Dept and Nbr: ADLTED 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	6	Lecture Scheduled	0
Minimum	0	Lab Scheduled	3.00	3	Lab Scheduled	18.00
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		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:

**Catalog Description:**

Instruction in basic operations with decimals, fractions, percents and conversions among them as related to various trades and industries. Application of measurement systems and metric system and basic principles of geometry to work-related tasks. Interpreting data in charts and graphs as related to specific career and technical fields.

**Prerequisites/Corequisites:****Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Instruction in basic operations with decimals, fractions, percents and conversions among them as related to various trades and industries. Application of measurement systems and metric system and basic principles of geometry to work-related tasks. Interpreting data in charts and graphs as related to specific career and technical fields. (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:
<b>CSU Transfer:</b>		Effective:	Inactive:
<b>UC Transfer:</b>		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, and conversions among them to workplace problem solving.
2. Use measurements from U.S. Standard and metric system with basic principles of geometry for planning and implementing tasks related to specific career and technical fields.
3. Interpret graphs and charts as they relate to specific workplaces.
4. Use appropriate technology in the process of computation for workplace problem solving.

**Objectives:**

Upon completion of the course, students will be able to:

1. Apply arithmetic concepts using whole numbers and decimals as they relate to a specific workplace;
2. Review arithmetic concepts using fractions, mixed numbers, and conversions between fractions and decimals as they relate to a specific workplace;
3. Compute proportions and percent problems used in a specific workplace.
4. Use the metric system in arithmetic problems that relate to a specific workplace.
5. Apply basic principles of geometry as they relate to a specific work situation.
6. Interpret basic representation of data as represented in graphs and charts.
7. Use appropriate technology in the process of making computations in the workplace e.g. construction, landscaping, culinary, healthcare, and office work.

**Topics and Scope:**

1. Conversions between decimals and fractions
3. Proportions and percents.
4. Conversions: decimals, fractions, percents
5. Strategies for solving workplace problems using decimals, fractions, and percents.

6. Measurement systems, conversions, and workplace applications
  - a. U.S. Standard
  - b. Metric
7. Basic principles of geometry
  - a. Perimeter and area of regular and irregular shapes
  - b. Volume
  - c. Angles
8. Interpreting data as represented in graphs and charts
9. Using electronic and web sources to help solve workplace problems

### Assignment:

1. Computational problems in all the arithmetic topics that apply to workplace math
2. Word problems using arithmetic topics that apply to specific career and technical fields
3. Application assignments and optional skill demonstrations that relate general arithmetic skills to the workplace
4. 1-3 quizzes; 1 final assessment

### 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%

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

Computational and word problems; application assignments

Problem solving  
30 - 50%

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

Application assignments; demonstrations of skills or competencies; oral analysis of problems

Skill Demonstrations  
30 - 50%

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

Quizzes and final assessment: multiple choice, completion, short answer

Exams  
10 - 30%

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

Participation in application assignments in workplace situations

Other Category  
10 - 20%

**Representative Textbooks and Materials:**

Instructor prepared materials

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

Mastering Workplace Skills: Math Fundamentals. Learning Express. 2015

Breakthrough to Math. 2nd ed. Grass Roots Press. 2014