

**ADLTED 721 Course Outline as of Spring 2021****CATALOG INFORMATION**

Dept and Nbr: ADLTED 721 Title: WORKPLACE ARITH--PT 1

Full Title: Workplace Arithmetic--Part 1

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 of whole numbers, fractions, decimals. Application of math concepts and problem-solving strategies to specific trades and industries.

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

Description: Instruction in basic operations of whole numbers, fractions, decimals. Application of math concepts and problem-solving strategies to specific trades and industries. (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>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>
<b>UC Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>

**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 whole numbers, decimals, fractions, mixed numbers, and conversions between fractions and decimals as they relate to problem-solving and calculations in the workplace.
2. Use appropriate technology in the process of computation.

### **Objectives:**

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

1. Compute whole number and decimal problems as they relate to the workplace.
2. Compute problems using fractions, mixed numbers, and conversions between fractions and decimals as they relate to the workplace.
3. Use appropriate technology in the process of making calculations in the workplace.

### **Topics and Scope:**

- I. Whole numbers and operations
  - A. Place value and word names
  - B. Rounding and estimating
  - C. Addition, subtraction, multiplication, division
  - D. Order of operations
- II. Fractions, as appropriate to specific career or technical field
  - A. Definitions, including
    1. numerator and denominator
    2. proper and improper fractions
    3. mixed numbers
  - B. Fraction operations, as appropriate
- III. Decimals, as appropriate to field
  - A. Place value and word names of decimal fractions
  - B. Rounding decimals
  - C. Conversions between decimals and fractions

- D. Listing decimals in order of value
- E. Addition, subtraction, multiplication, division of decimals
- IV. Measurement with emphasis on system most appropriate for specific workplace field
  - A. U.S. Standard
  - B. Metric system
- V. Conversions between decimals and fractions, as needed
- VI. Problem-solving strategies appropriate to field
- VII. Interpreting basic charts, graphs, and other visual information as related to specific career field
- VIII. Using technological tools and resources to solve typical problems within the field

### Assignment:

Assignments will relate to specific trades and industries, as designated by instructor.

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. 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, skill demonstrations

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

Other Category  
10 - 20%

**Representative Textbooks and Materials:**

Instructor prepared materials

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

Mastering Workplace Skills: Math Fundamentals. Learning Express. 2015

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