**ADLTED 721 Course Outline as of Summer 2017** 

## **CATALOG INFORMATION**

Dept and Nbr: ADLTED 721 Title: WORKPLACE ARITH--PT 1 Full Title: Workplace Arithmetic--Part 1 Last Reviewed: 10/24/2022

Units		<b>Course Hours per Week</b>	N	or of Weeks	<b>Course Hours Total</b>	
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-CreditGrading:Non-Credit CourseRepeatability:27 - Exempt From Repeat ProvisionsAlso 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:

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

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

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

Computational and word problems; application assignments.

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

Application assignments, skill demonstrations

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

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

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

Participation in application assignments

Problem solving 30 - 50%

Writing

0 - 0%

Skill Demonstrations 30 - 50%

> Exams 10 - 30%

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