### **CSKLS 362 Course Outline as of Summer 2019**

# **CATALOG INFORMATION**

Dept and Nbr: CSKLS 362 Title: PROP & PER SKILLS Full Title: Proportions and Percent Skills Last Reviewed: 12/10/2018

Units		Course Hours per Week	N	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	0.50	Lecture Scheduled	0	17.5	Lecture Scheduled	0
Minimum	0.50	Lab Scheduled	1.50	1	Lab Scheduled	26.25
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00

Total Student Learning Hours: 26.25

Title 5 Category:	AA Degree Non-Applicable
Grading:	P/NP Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	CSKL 300.3

### **Catalog Description:**

This course is designed to prepare students for success in future courses and the workplace. Students will learn techniques for converting between percentages, fractions and decimals. Students will solve word problems involving proportions. All work will be completed in a lab setting.

### **Prerequisites/Corequisites:**

**Recommended Preparation:** 

### **Limits on Enrollment:**

### **Schedule of Classes Information:**

Description: This course is designed to prepare students for success in future courses and the workplace. Students will learn techniques for converting between percentages, fractions and decimals. Students will solve word problems involving proportions. All work will be completed in a lab setting. (P/NP Only) Prerequisites/Corequisites:

# **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:**

Not Certificate/Major Applicable

# **COURSE CONTENT**

### **Student Learning Outcomes:**

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

- 1. Demonstrate mastery of the basic arithmetic operations involving fractions, decimals, proportions, and percents.
- 2. Analyze proportional relationships and use them to solve real-world and mathematical problems.
- 3. Use academic literacy skills to improve studying and learning.

### **Objectives:**

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

- 1. Work flexibly between percents, decimals and fractions.
- 2. Use ratio and rate reasoning to solve real-world problems.
- 3. Compare and contrast different ways to find values in proportional relationships.
- 4. Use proportional relationships to solve multi-step ratio and percent problems.
- 5. Apply problem-solving skills to college classes, the workplace, and daily life situations.

### **Topics and Scope:**

- I. Ratio
  - A. Definitions and essential characteristics of ratios
  - B. Representing ratios and equivalent ratios
  - C. Connecting ratio to fractions
  - D. Ratio tables
  - E. Double number line diagrams
  - F. Percents as ratios
  - G. Relating percents to fractions and decimals
  - H. Solving problems with percents
- II. Proportional Relationships

- A. Recognizing proportional relationships
- B. Equations for proportional relationships

C. Correspondences among tables, graphs and equations of proportional relationships

III. Mathematical Modeling and Applications such as:

- A. Commission
- B. Income and sales tax
- C. Appreciation and depreciation
- D. Discount and mark up
- E. Finance charge and interest
- F. Similar figures

# Assignment:

1. Lab Assignments (15 - 20)

# 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.

Lab assignments

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

None

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

None

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

Attendance and participation

# **Representative Textbooks and Materials:**

Instructor prepared materials

Writing 0 - 0%

Problem solving 50 - 70%

Skill Demonstrations 0 - 0%

> Exams 0 - 0%

Other Category 30 - 50%