

CATALOG INFORMATION

Dept and Nbr: ADLTED 533    Title: AC SKLS/GED PREP/SCI 3  
Full Title: Basic Academic Skills and GED Preparation--Science 3  
Last Reviewed: 11/13/2017

| 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 and individualized learning plans are provided for preparation for the GED and other High School Equivalency (HSE) tests. Course also provides academic skills development in preparation for: credit science courses; Career Technical Education (CTE) classes; and Basic Academic Skills Certificate of Completion. Third level of science course covers Physical Science, as determined through initial assessment.

**Prerequisites/Corequisites:**

**Recommended Preparation:**

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Instruction and individualized learning plans are provided for preparation for the GED and other High School Equivalency (HSE) tests. Course also provides academic skills development in preparation for: credit science courses; Career Technical Education (CTE) classes; and Basic Academic Skills Certificate of Completion. Third level of science course

covers Physical Science, as determined through initial assessment. (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. Demonstrate comprehension of basic academic, workplace, and recreational reading of science through discussion and/or brief written responses.
2. Demonstrate expanded scientific vocabulary through discussion and/or brief written responses.
3. Describe common concepts in the Physical Sciences.

### **Objectives:**

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

1. Describe and explain key concepts in the Physical Sciences.
2. Analyze graphs and charts related to the Physical Sciences.
3. Study for the GED or other HSE tests.

### **Topics and Scope:**

#### **I. Matter and its Interactions**

- A. Elements, atoms, and the periodic table
- B. Compounds and bonding
- C. Reaction rates
- D. Le Chatelier and equilibrium
- E. Conservation of mass
- F. Radioactive decay, fission, and fusion

#### **II. Motion and Stability: Forces and Interactions**

- A. Balanced and unbalanced forces
- B. Force, mass, and acceleration

- C. Graphing motion
- D. Momentum
- E. Strength of noncontact forces
- F. Electricity and magnetism
- G. Electromagnets
- H. Materials engineering
- III. Energy
  - A. Conservation of energy
  - B. Thermodynamics
  - C. Electrostatic forces
- IV. Waves and Digital Information
  - A. Mechanical waves
  - B. Advantages of digital information systems
  - C. Disadvantages of digital information systems
  - D. Electromagnetic ratios--waves or particles?
  - E. Effects of electromagnetic radiation
- V. GED Practice Test
  - A. Multiple Choice
  - B. Extended Response Questions

### Assignment:

1. Reading from assigned shorter texts, magazines, newspapers, and job-related materials focusing on scientific texts
2. Instructor-designed exercises and practice quizzes (4 - 6)
3. Scientific calculation problems (4 - 6)
4. Practice exam

### 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.

Scientific calculation problems

Problem solving  
10 - 20%

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

None

Skill Demonstrations  
0 - 0%

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

|  |                            |
|--|----------------------------|
| Practice exam; quizzes   | Exams<br>70 - 80%          |
| <b>Other:</b> Includes any assessment tools that do not logically fit into the above categories. |                            |
| Class participation  | Other Category<br>10 - 20% |

**Representative Textbooks and Materials:**

Instructor prepared materials  
 McGraw-Hill Education Science Workbook for the GED Test. McGraw-Hill Education. 2015  
 Kaplan GED Test Science 2015: Strategies, Practice, and Review. Van Slyke, Caren. Kaplan Publishing. 2015  
 Ciensas. Steck-Vaughn GED: Test Preparation 2014 for GED Science. Spanish Student Edition. Houghton Mifflin Harcourt. 2014