

# **Western Technical College**

# 10513110 Basic Lab Skills

# **Course Outcome Summary**

### **Course Information**

**Description** This course explores health career options and the fundamental principles and

procedures performed in the clinical laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control

procedures and perform simple laboratory tests.

Career

Health Science

Cluster

Instructional

**Associate Degree Courses** 

Level

Total Credits 1
Total Hours 36

### **Textbooks**

Basic Clinical Laboratory Techniques. 6th Edition. Copyright 2012. Estridge, Barbara H. and Anna P. Reynolds. Publisher: Cengage Learning. **ISBN-13**:978-1-111-13836-3. Required.

### **Learner Supplies**

Lab Coat - \$20. Vendor: Campus Shop. Required.

Safety Glasses. Vendor: Campus Shop. Required.

Sharpie Permanent Marker. Vendor: Campus Shop. Required.

### **Success Abilities**

1. Cultivate Passion: Expand a Growth-Mindset

## **Program Outcomes**

1. Practice laboratory safety and regulatory compliance

## **Course Competencies**

### 1. Investigate laboratory science occupations

### **Assessment Strategies**

1.1. oral, written, or skill assessment

#### Criteria

- 1.1. you identify all of the significant laboratory occupations
- 1.2. you include educational requirements of each laboratory occupation
- 1.3. you include certification and continuing education requirements of each laboratory occupation
- 1.4. you include occupational responsibilities of each laboratory occupation
- 1.5. you include occupational relationships with other health care providers

### **Learning Objectives**

- 1.a. List departments of the medical laboratory.
- 1.b. List common laboratory occupations and personnel.
- 1.c. List responsibilities of common laboratory occupations.
- Describe the educational requirements for common laboratory occupations and personnel.
- 1.e. Describe career-laddering options for laboratory occupations.
- 1.f. Examine the relationship of laboratory occupations with other healthcare providers.
- 1.g. Examine professional organizations and certification agencies

# 2. Apply medical terminology to lab procedures and practices

#### **Assessment Strategies**

- 2.1. oral, written, or skill assessment
- 2.2. by using correct medical terminology, procedures and practices on classroom assignments

#### Criteria

- 2.1. you utilize correct medical terminology, procedures and practices
- 2.2. you correctly spell all terms, procedures, and practices
- 2.3. you correctly pronounce medical terms, procedures, and practices

#### **Learning Objectives**

- 2.a. Explain why using the correct medical terminology is important
- 2.b. Identify sources for defining medical terminology
- 2.c. Define significant medical terms used in a health care setting

### 3. Perform waived testing

### **Assessment Strategies**

- 3.1. in the laboratory
- 3.2. oral, written, and/or skill demonstration
- 3.3. with a client
- 3.4. with the use of a procedure manual if necessary

#### Criteria

- 3.1. you select the correct tools, equipment, instruments, materials, supplies
- 3.2. you perform all critical steps in the right order
- 3.3. you position yourself correctly
- 3.4. you utilize correct procedure protocol, technique, method, and specimen
- 3.5. you wear personal protective equipment
- 3.6. you follow infection prevention and safety procedures
- 3.7. you verbalize an explanation of the process as you perform it
- 3.8. your explanation presents sound reasoning as you describe the decisions you make throughout the process

### **Learning Objectives**

3.a. Identify the characteristics of waived tests.

- 3.b. Identify personnel whom can perform waived tests.
- 3.c. Follow manufacturer's instructions for performing and interpreting the assigned test.

### 4. Adhere to safety and infection control policies

### **Assessment Strategies**

- 4.1. oral, written, and/or skill demonstration
- 4.2. in the laboratory
- 4.3. with a client
- 4.4. with the use of a safety manual, MSDS sheets, Exposure Control Manual, Infection Control policies
- 4.5. in a written test given instructor provided questions, scenarios or problems

#### Criteria

- 4.1. you determine or access the appropriate manuals, safety equipment, PPE and institutional safety and infection control procedures
- 4.2. you determine or wear personal protective equipment
- 4.3. you identify or perform all critical steps in the right order
- 4.4. you follow or explain infection prevention and safety procedures
- 4.5. you identify or verbalize an explanation of the process or procedure
- 4.6. your explanation demonstrates sound reasoning for the decisions you make concerning the process, procedure or scenario.

### **Learning Objectives**

- 4.a. Explain physical safety policies
- 4.b. Explain chemical safety policies
- 4.c. Adhere to biological safety policies
- 4.d. Practice infection control

### 5. Use basic laboratory equipment

#### **Assessment Strategies**

- 5.1. in the laboratory
- 5.2. oral, written, and/or skill demonstration
- 5.3. with the use of references

#### Criteria

- 5.1. you select the correct equipment, instrument, materials, and supplies for each procedure
- 5.2. you demonstrate pipetting skills
- 5.3. you use lab glassware
- 5.4. you operate centrifuges and balances
- 5.5. you use a microscope
- 5.6. you perform all critical steps in the right order
- 5.7. you utilize proper technique
- 5.8. you wear personal protective equipment
- 5.9. you follow infection prevention and safety procedures
- 5.10. you verbalize an explanation of the process as you perform it
- 5.11. your explanation presents sound reasoning as you describe the decisions you make throughout the process

#### **Learning Objectives**

- 5.a. Demonstrate pipetting skills
- 5.b. Use lab glassware
- 5.c. Operate centrifuges
- 5.d. Demonstrate use of balances

### 6. Evaluate laboratory compliance with CLIA regulations

#### **Assessment Strategies**

- 6.1. by developing a diagram depicting CLIA regulations and compliance steps
- 6.2. oral, written, and/or skill demonstration

#### Criteria

- 6.1. you identify major components of the CLIA regulation
- 6.2. you show the relationship of one component to another

6.3. you include the proficiency testing process

# **Learning Objectives**

- 6.a. Describe the major components of CLIA
- 6.b. Explain the relationship of one CLIA component to another
- 6.c. Demonstrate understanding of regulatory compliance
- 6.d. Explain the proficiency testing process