

# Lab Protocol: Module 12 – Gene Expression

---

BIOL-1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Lab Title

[To be determined]

## Overview

This lab protocol is a stub and will be developed with detailed procedures, materials, and safety information.

---

## Learning Objectives

- Describe the central dogma of molecular biology
- Model transcription and translation processes
- Understand the genetic code and codon usage
- Analyze the effects of mutations on protein synthesis
- Connect gene expression to cellular function

## Estimated Duration

2-3 hours

## Materials Needed

[To be listed]

## Safety Considerations

[To be listed]

## **Procedure**

*[To be developed]*

## **Data Collection**

*[To be developed]*

## **Analysis Questions**

*[To be developed]*

## **Conclusion**

*[To be developed]*

---

*Note: This is a placeholder document. Complete lab protocol to be developed.*