

## BIOL 2601L - General Biology I: Molecules and Cells Laboratory

Fall 2026 Syllabus, Section 09, CRN 42324,

Credit hours: 1

### Instructor

Zachary Davis

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### Public Instructor Information

Instructor Title:

Instructor Professional Qualifications:

Instructor Office Location:

Instructor Office Phone:

### Course Description

2601L. General Biology I: Molecules and Cells Laboratory. The chemical and physical foundations of life, including scientific communication, cell biology, metabolism, basic molecular biology and diversity. Two hours of lab each week. Coreq.: BIOL 2601. Prereq. or Coreq.: CHEM 1515. 1 s.h.

### Course Readings

| Group | Title                                | Author                  | ISBN          |
|-------|--------------------------------------|-------------------------|---------------|
|       | General Biology 2601-2602 Lab Manual | Asch, Diggins and Renee | 9781792444432 |

<https://he.kendallhunt.com/Asch>

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

### Schedule of Topics and Assignments

| Week of | Reading(s)                                                                                                                                           | Proposed Topic | Due/To Prepare for Class |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|
| 8/24    | No lab                                                                                                                                               |                |                          |
| 8/31    | Module 1 – Scientific Communication<br>Introduction Syllabus Introduction                                                                            |                |                          |
| 9/7     | Module 1 – Scientific Communication The<br>Scientific Method Introduction to Keeping<br>a Laboratory Notebook Reaction Time<br>Experiment            |                |                          |
| 9/14    | Writing Laboratory Reports Reaction<br>time cont. Statistical Analyses Creating<br>Figures, Graphs, and Tables Reaction Time<br>Experiment – Part II |                |                          |
| 9/21    | Module 2 – Cell Biology Osmosis I<br>Laboratory Notebook Due for Module 1                                                                            |                |                          |
| 9/28    | Module 2 – Cell Biology Osmosis II                                                                                                                   |                |                          |
| 10/5    | Module 2 – Cell Biology Fermentation I<br>Laboratory Report on Osmosis Due                                                                           |                |                          |
| 10/12   | Module 2 – Cell Biology Fermentation II                                                                                                              |                |                          |
| 10/19   | Laboratory Examination 1 Laboratory<br>Notebook Due for Module 2                                                                                     |                |                          |

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| 10/26 | Module 3 – Evolution and Diversity Gel Electrophoresis                                   |
| 11/2  | Module 3 – Evolution and Diversity Population Genetics: Hardy-Weinberg Equilibrium       |
| 11/9  | Module 3 – Evolution and Diversity Bacteria Laboratory Report on Gel Electrophoresis Due |
| 11/16 | Module 3 – Evolution and Diversity Data collection from Bacteria                         |
| 11/23 | Review for Lab exam 2                                                                    |
| 11/30 | Laboratory Examination 2 Laboratory Notebook Due for Module 3                            |
| 12/7  | Finals Week, No Lab                                                                      |

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