

**WEST VIRGINIA UNIVERSITY AT PARKERSBURG**  
**UNIFORM COURSE SYLLABUS**

Name of Course: General Biology I  
Department: Biology

Course No. Biology 101  
Division: Natural Sciences/Mathematics

**I. Course Objectives**

- A. Identify the cell as an example of a biosystem, its specific organelle structure and their respective functions.
- B. Recognize the relative structure importance of energy flow through the study of the bioenergetic processes of photosynthesis and cellular respiration.
- C. Demonstrate and relate chemical interactions to the subsequent form and function of biological organisms.
- D. Create an understanding of the significance of nucleic acids in cell function and inheritance.
- E. Characterize and compare the mitotic somatic cell cycle to that of the meiotic formation of gametes.
- F. Describe Mendelian genetics and be able to analyze and solve classical genetics problems.

**II. Topics to Be Studied**

- A. Introduction to Biology.
- B. Methods of Science.
- C. Cell Structure and Function.
- D. Biological Membranes.
- E. Chemical Compounds of Biological Significance
- F. Energy of Life
- G. Photosynthesis
- H. Cellular Respiration
- I. Molecular Genetics: DNA, RNA
- J. Protein Synthesis
- K. Cell Reproduction
- L. Mendelian Genetics
- M. Origin of Life & Biological Evolution

**III. Special Projects to Be Included in Course**

<b>Research papers</b>	<b>Reports</b>
<b>Surveys</b>	<b>Annotated bibliographies</b>
<b>Other</b>	

None

**IV. Methods of Student Evaluation**

**Tests (how many? how often? what type?)**

**Quizzes**

**Oral Presentations**

**Written Papers**

**Laboratory Activities**

**Clinical Experiences**

- A. 3-5 objective and subjective hour examinations and a final two hour examination.
- B. Periodic announced and/or unannounced quizzes, variable in number.
- C. Short written assignments.

**V. Assessment of Outcomes**

**What measurements will be used to demonstrate that outcomes have been reached?  
(Refers to class as a whole, not individual students.)**

- A. At least 75% of those students entering the course will complete the course with a passing grade.
- B. At least 80% of those students completing the course will do so with a letter grade of C or better.
- C. 90% of the elementary education students taking Science 301 (Instructional Strategies in Science) will complete the course with a C or better.
- D. 95% of the elementary education students will successfully pass the science content specialization exam.
- E. Of those students that take Biology 211 and/or 212 at least 80% will successfully complete the course(s) with a letter grade of C or better.

**VI. Other Information**

**What additional information will help to clarify the course?**

None