Syllabus for
BIO 111—Introductory Biology I Lecture
3.0 Credit Hours
Fall 2002

I. COURSE DESCRIPTION

An introduction to the study of general biology covering the scientific method, levels of organization, the cell, photosynthesis, respiration, classical and molecular genetics, and vertebrate biology. (Designed for biology majors and minors. BIO 101 and BIO 111 may not both be taken for credit. Honors sections are available for this course.)
Corequisite: BIO 111 Lab.

II. COURSE GOALS

Enrollment in this course commits a student to learning. The teacher for the course commits to helping the student learn. If both student and teacher are true to their commitments, teaching and learning will occur. The activities and situations that contribute to learning are simple and well known: repetition, concentration, association, small unit steps, use of a communication vehicle appropriate to the nature of the objective, and learning events sequenced to permit each one to complement or enhance the associated one. These are some activities that are utilized in BIO 111 Lecture instruction.

III. COURSE OBJECTIVES

A. Terminal Objectives

As a result of successfully completing this course, the student will be able to do the following:

1. Discuss the principles of life common to both plants and animals.
2. Describe and use the scientific method in problem-solving situations.
3. Describe the various structures and function of each level of organization.
4. Relate the principles of biology to problems in modern life within a Christian perspective.
5. Define the terms necessary to comprehend and discuss the biological concepts presented in the course.
6. Exhibit a mature, responsible attitude toward his or her work by being prepared, present, and punctual for the training inherent in the discipline of science and in the development of consistent Christian character.
7. Relate the role of biology to modern problems; e.g., energy, environmental pollution, world food problems, etc.
8. Read science periodicals with interest and understanding.
9. Develop an appreciation of life, God's greatest creation.

B. Unit Objectives

As listed in Course Calendar.

C. Objectives for Students in Teacher Preparation Program.

The Teacher Preparation Program meets the competency-based requirements established by the Oklahoma Commission on Teacher Preparation. This course meets the following competencies: Subject Competencies (SC) 7.b.1, 7.b.6, 7.b.7,

7.b.10.
This course is designed to help students meet subject competencies:
SC 7.b.1: Structure and function in living systems.
SC 7.b.6: The cell.
SC 7.b.7: The molecular basis of heredity.
SC 7.b.10: Matter, energy, and organization in living systems.

IV. TEXTBOOKS

A. Required Textbook
Solomon, C.E., Berg, L.R. and Martin, D.W. 2002. Biology, 6th ed., Brooks/Cole Thomson Learning; Pacific Grove, CA 93950.
AND/OR
Thinkwell's "Biology" CD's plus Internet Site. 2002. Thinkwell Corporation; 2810 S. First Street, Austin, TX 78704

B. Supplemental Learning Aids
Cyber-Ed Biology series in CLC

V. POLICIES AND PROCEDURES

A. University Policies and Procedures
1. Attendance at each class or laboratory is mandatory at Oral Roberts University.
2. Double cuts will be assessed for absences immediately preceding or following holidays.
3. Excessive absences can reduce a student's grade or deny credit for the course.
4. Students taking a late exam because of an unauthorized absence will be charges a late exam fee.
5. Students and Faculty at Oral Roberts University adhere to all laws addressing the ethical use of others' materials, whether it be in the form of print, video, multimedia, or computer software.
6. Final exams cannot be given before their scheduled times. Students need to check the final exam schedule before planning return flights or other events at the end of the semester.

B. Course Policies and Procedures
1. Evaluation Policies and Procedures
a. The **final exam** is a 200-point, two-hour, comprehensive final exam. It is administered during final exam week as scheduled by the Registrar's Office.
b. **Interim exams** are given every 2-3 weeks covering a unit or set of units of study as scheduled in the course calendar. These are 100-point exams composed mostly of objectives, recall-type questions but with some synthesis and/or analysis type questions. Retake exams are available to those who score below the 60% mark on any of these exams. A retake exam has an automatic 30-point handicap that means the highest possible retake score is 70%. The retake exam covers the same set of objectives and questions with an altered version of the exam.
c. **Homework and Quizzes**. See d. (3) and d. (4).
d. The course grade is determined from the following evaluation sources:
(1) Final Exam 200 points
(2) Five Interim Exams @ 100 points each 500 points

(3) Homework – 30 @ 5 points each 150 points
(4) Quizzes – 30 @ 5 points each 150 points

TOTAL POSSIBLE POINTS IN COURSE 1000 points

e. The course letter grade is assigned as follows:

Letter Grade	Points (Percentages)
A	900-1000 (90-100%)
B	800-899 (80-89%)
C	700-799 (70-79%)
D	600-697 (60-69%)
F	Less than 600 (<60%)

2. Honor Code: We believe students to be maturing young adults ready and able to assume those responsibilities for their own behavior. What a person learns is directly proportional to the effort expended. The grade one earns from the course may or may not reflect accurately how much that person has really learned, but it's the best measuring tool education possesses at the present time that is universally accepted and recognized. Grades earned, over the long haul, are less important than true learning. Therefore, since learning is the result of individual effort, we expect individualized work. In this course, academic dishonesty includes (1) being diligent in maintaining exam security; (2) being prompt and dependable; and (3) being honest concerning class attendance. Dishonesty in any of the above specified points is in violation of the Honor Code and could incur the penalties as specified in the Student Handbook and/or department's statement.
3. Attendance Policies and Procedures
   a. Perfect class attendance will earn the student 10 points extra credit on his or her semester point total.
   b. If one is to be a part of the answer instead of the problem, one must do what has to be done, when it ought to be done, whether it's agreeable or not. This is the mark of a truly mature person. Dependability and self-discipline are very important in the development of strong Christian character.
   c. Excused Absences: Absences may be excused by the Instructor, the Dean, or other Administrators for LEGITIMATE reasons. An "E" will be assigned for classes missed. The absence(s) will not count against the student, but neither DOES IT EXCUSE the individual from knowing information missed nor from making appropriate arrangements for exam/quiz makeup(s). Failure to make proper arrangements for makeup(s) may result in a **late test fee** being assessed.
   d. Unexcused Absences: Each student is allowed three unexcused absences. Thereafter, every unexcused absence will lower the semester point total by 10 points for each absence more than three. Sleeping in class = an absence. A late test fee may be charged for make-up exams because of unexcused absences on exam days. Late exams may also be penalized if the circumstances warrant.
   e. Tardiness: Habitual tardiness is to be avoided like the plague. Three (3) tardies = one (1) absence. Leaving a class in session = absence or tardy. Late submission of assignments result in a 10% grade reduction per day late.

VI. COURSE CALENDAR

Week	Dates	Topics	Text/Syllabus
1		Nature and Logic of Science	See Unit 1 Learning Objectives
2		Chemical Basis of Life	
	_____	INTERIM EXAM 1	
3		Cell Structure and Function	See Unit 2 Learning Objectives
4		The Energy of Life	
5		Energy via Photosynthesis	
	_____	INTERIM EXAM 2	
6		Energy via Metabolism	See Unit 3 Learning Objectives
7		DNA and Protein Synthesis	
	_____	INTERIM EXAM 3	
8		Cellular Reproduction	See Unit 4 Learning Objectives
9-10		Patterns of Inheritance	
	_____	INTERIM EXAM 4	
11		Reproduction/Development	See Unit 5 Learning Objectives
12		Organ Systems Skin, Skeleton, Muscles	
13	_____	INTERIM EXAM 5	
		Digestive System	See Unit 6 Learning Objectives
14		Circulatory System	
		Respiratory System	
		Excretory System	
15		Nervous System	
		Endocrine System	
	_____	INTERIM EXAM 6	
	_____	FINAL EXAM	

VII. ASSESSMENT SUMMARY

Dr. Richard Couch
Name of Instructor

Biology 111
Course No.

Introductory Biology I Lecture
Title of Course

Biology
Name of Department

MISSION

The lifestyle at ORU is rooted in the word "Wholeness." ORU seeks to educate the whole person, with balanced emphasis placed on the development of the mind, spirit, and body.

GENERAL OUTCOMES

1. Spiritual Development
2. Physical Development
3. Communication
4. Analysis
5. Problem Solving
6. Valuing in Decision-making
7. Social Interaction
8. Global Perspectives
9. Effective Citizenship
10. Aesthetic Responsiveness

MAJOR OUTCOMES

Analysis/Problem Solving

Be proficient in biology by acquisition of a broad-based knowledge in biology and by the development of scientific skills.

Be equipped to do independent investigation, analysis, and evaluation of a scientific nature.

Communication

Be able to effectively communicate science in written and oral format.

Global Perspective/Spiritual Development

Be able to develop a scientific worldview consistent with Biblical truth.

COURSE OUTCOMES

This is the first of a series of four courses (BIO 111, 111 Lab, 112, and 112 Lab) designed to serve as an introduction to the study of biology. This series of courses is designed to provide the individual with the basic language and conceptual foundation upon which to build his or her major leading to a career in biological or health-related fields.

ASSESSMENT OF COURSE GOALS

STIMULI

Will have developed a biology vocabulary sufficient for reading biology literature and conversing with professional biologists as evidenced by making a passing grade (D or better= >60%) in the course.

CRITERIA

Demonstrate biology language proficiency by learning to "speak biology."

Demonstrate understanding of biology principles via written examination (>60%)