

Syllabus for
BIO 112H—Introductory Biology II Honors Lecture
3.0 Credit Hours
Spring 2008

I. COURSE DESCRIPTION

An introduction to the taxonomy and characteristic structural and functional attributes of plants, invertebrates, and vertebrates. Includes evolution, ecology, and behavior.

Prerequisites: One semester of biology.

Corequisite: BIO 112 Lab.

Honors Distinctives: The Honors lecture will cover material in more detail and involve more classroom discussion of material by students.

II. COURSE GOALS

Biology 112 is one of four courses (the others are BIO 111 Lecture, 111 Lab, and 112 Lab) comprising a sequence designed to serve as an introduction to the study of biology. This series provides the student with the basic language and conceptual foundation upon which to build students' major leading to a career in biological or preprofessional health-related fields. Those courses are prerequisite to all other biology courses from which biology and preprofessional health career majors make their choices depending upon individual goals, interests, and departmental requirements.

III. STUDENT LEARNING OUTCOMES FOR THIS COURSE

A. Terminal Objectives

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

1. Express orally and in writing an appreciation for life, God's greatest creation.
2. Discuss ways in which biological knowledge can be used for helping to solve local, state, national, and world problems.
3. Become conversant (both orally and written) in the "language of biology."
4. Evaluate the phylogenetic relationships among living creatures.
5. Outline the classifications of living organisms.
6. Compare and contrast physiological, anatomical, and reproduction modes among the various groups of plants and animals.

B. Objectives for Students in Teacher Preparation Programs.

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 AND OTHER LEARNING RESOURCES

A. Required Texts

Solomon, E.P., Berg, L.R. and Martin, D.W. 2008. Biology, 8th edition. Thompson Brooks/Cole.

Wright, R.T. 2003. Biology Through The Eyes of Faith, San Francisco: Harper Collins.

B. Required Materials

1. BIO 112 Syllabus
2. Dr. Korstad's Lecture Notes Outline.

C. 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. Excessive absences can reduce a student's grade or deny credit for the course.
2. Students taking a late exam because of an unauthorized absence are charged a late exam fee.
3. Students and faculty at Oral Roberts University must adhere to all laws addressing the ethical use of others' materials, whether it is in the form of print, video, multimedia, or computer software. By submitting an assignment in any form, the student gives permission for the assignment to be checked for plagiarism, either by submitting the work for electronic verification or by other means.
4. 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.
5. Students are to be in compliance with University, school, and departmental policies regarding ePortfolio requirements. Students should consult the ePortfolio handbooks for requirements regarding general education and the students' majors.
 - a. The penalty for not submitting electronically or for incorrectly submitting an ePortfolio artifact is a zero for that assignment.
 - b. By submitting an assignment, the student gives permission for the assignment to be assessed electronically.

B. Course Policies and Procedures

1. Evaluation Procedures

- a. There will only be 5 hourly major exams and NO exam will be dropped. Any quiz above the 5th quiz will be dropped.

	<u>Points Possible</u>
Creation-evolution essay	50
5 quizzes @ 20 points each	100
4 one-hour tests at 125 points each	500
1 final comprehensive exam	<u>200</u>
Total for Course	850

- b. Final Grade Evaluation:
- | | |
|--------|---|
| >90% | A |
| 80-89% | B |
| 70-79% | C |
| 60-69% | D |
| <60% | F |

c. Final Exam

A 200-point, comprehensive final exam is administered during final exam week as scheduled by the Registrar's Office. This exam tests for knowledge on information discussed and learned since the last interim exam as well as material covered during the whole semester.

d. Interim Exams

These exams are given every two to three weeks covering a unit or set of units of study as scheduled in the course calendar. Four exams are given during the semester. These are 125-point, in-class exams composed mostly of objective, recall-type questions but with some fill in the blank and synthesis and/or analysis-type questions.

e. Quizzes

At least five (5) quizzes of varying points are given during the semester. These may be announced or unannounced (pop quiz). The total for all quizzes will be about 100 points.

f. Essay

A creation-evolution essay is to be written based on chapters 4-8 in Wright's text *Biology Through the Eyes of Faith*. This essay should discuss the pros and cons of the various creation models presenting your views with supporting reasons. This typed paper will be worth 50 points and due at the end of week 7.

2. ePortfolio Requirements

The creation-evolution essay (in 1f above) will be used to satisfy outcome 4 for any general education ePortfolio.

3. Other Policies and/or Procedures

If one is to be a part of the answer instead of the problem, a person must make oneself do what must be done, when it has to be done, whether it is 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.

a. 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 DOES NOT EXCUSE one 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.

b. Unexcused Absences

An individual is allowed three unexcused absences. Thereafter, every unexcused absence lowers the semester's point total by 10 points. Sleeping in class equals an absence.

c. Tardiness

For a mature individual, habitual and inexcusable tardiness is to be avoided like the plague. Three (3) tardies equals one (1) absence. Late

submission of assignments results in a 10% grade reduction per day late.

VI. COURSE CALENDAR

Week	Date	Topics	Assignment (to be discussed in class)
1	_____	Introduction Phylogeny and Systematics	Syllabus Ch. 23
2	_____	Creation/Evolution Viruses/Prokaryotes	Ch. 18-20 Ch. 24
3	_____	Protists: Algae/Slime Molds	Ch. 25 (plant parts)
4	_____	EXAM I Fungi	Ch. 26
5	_____	Seedless Plants	Ch. 27
		Seed Plants	Ch. 28
6-7	_____	Plant Form and Function, Leaves, Flowers, etc.	Ch. 32-37
		EXAM 2 Creation/Evolution essay due	
8	_____	Intro. To Animal Diversity; Animal-like Protists	Ch. 25 & 29 (See Dr. Korstad's lecture outline for all assignments and objectives)
9-10	_____	Invertebrates (Porifera, Cnidaria, Ctenophora, Platyhelminthes, Nemertinea, Nematoda) EXAM 3 (See lecture outline for coverage)	Ch. 29 & 30
11	_____	Invertebrate Coelomate Protostomes (Annelida, Mollusca, Arthropoda)	Ch. 30
12	_____	Invertebrate Deuterostomes (Echinodermata, Hemichordata, Chordata)	Ch. 31 (part)
13	_____	Vertebrates EXAM 4 (See lecture outline for coverage)	Ch. 31 (part)
Week	Date	Topics	Assignment

(to be discussed in class)

14	_____	Ecology	Ch. 52-55
15	_____	Animal Behavior EXAM 5 (See lecture outline for coverage)	Ch. 51
		FINAL EXAM (Drs. Reed & Korstad questions—one half from each)	

Course Inventory for ORU's Student Learning Outcomes

Introductory Biology II Honors Lecture – BIO 112H Spring 2008

This course contributes to the ORU student learning outcomes as indicated below:

Significant Contribution – Addresses the outcome directly and includes targeted assessment.

Moderate Contribution – Addresses the outcome directly or indirectly and includes some assessment.

Minimal Contribution – Addresses the outcome indirectly and includes little or no assessment.

No Contribution – Does not address the outcome.

The Student Learning Glossary at <http://ir.oru.edu/doc/glossary.pdf> defines each outcome and each of the proficiencies/capacities.

OUTCOMES & Proficiencies/Capacities		Significant Contribution	Moderate Contribution	Minimal Contribution	No Contribution
1	Outcome #1 – Spiritually Alive Proficiencies/Capacities				
1A	Biblical knowledge			X	
1B	Sensitivity to the Holy Spirit			X	
1C	Evangelistic capability			X	
1D	Ethical behavior		X		
2	Outcome #2 – Intellectually Alert Proficiencies/Capacities				
2A	Critical thinking		X		
2B	Information literacy			X	
2C	Global & historical perspectives		X		
2D	Aesthetic appreciation			X	
2E	Intellectual creativity		X		
3	Outcome #3 – Physically Disciplined Proficiencies/Capacities				
3A	Healthy lifestyle				X
3B	Physically disciplined lifestyle				X
4	Outcome #4 – Socially Adept Proficiencies/Capacities				
4A	Communication skills			X	
4B	Interpersonal skills			X	
4C	Appreciation of cultural & linguistic differences			X	
4D	Responsible citizenship		X		
4E	Leadership capacity			X	