

Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.



COURSE SYLLABUS

BIOL 101

PRINCIPLES OF BIOLOGY

COURSE DESCRIPTION

An examination of the fundamental characteristics common among living things. Emphasis is placed upon studies of the cell, energy, metabolism, reproduction, heredity, ecology, phylogeny and the diversity of life.

RATIONALE

The purpose of this course is to convey to the student both the usefulness and limitations of the scientific method. It will also help the student gain a better framework of biological knowledge so that he or she can more fully appreciate the beauty, complexity, and diversity of life. As a result, the student will better understand the biological issues as they arise in everyday life, and this will enhance his or her desire to worship and praise the Creator.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the <u>Academic Course Catalog</u>.

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended
- C. Please note, technical skills for this course include:
 - Creating and submitting files in Microsoft Word
 - Basic Blackboard navigation skills
- D. Software ("plug-ins") to read Quicktime and Shockwave files (obtainable free online from Quicktime and Adobe sites)

IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

- A. Logically organize, critically analyze, and apply scientific ideas, theories, and information.
- B. Apply basic biological and scientific principles to real and hypothetical circumstances in order to predict likely outcomes or behaviors.
- C. Apply biological and environmental principles from the biblical worldview in order to make informed decisions on moral and ethical issues and to weigh the consequences of those decisions.

V. CORE COMPETENCY LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

- A. Evaluate information to determine if it is supported by the evidence.
- B. Apply reading comprehension strategies including interpreting, evaluating, and analyzing written content.

VI. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and lecture presentations
- B. Course Requirements Checklist

After reading the Course Syllabus and <u>Student Expectations</u>, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (3)

Discussion boards are collaborative learning experiences. Therefore, the student will create a thread in response to the provided prompt for each forum. Each thread must be no more than 100 words and demonstrate course-related knowledge. In addition to the thread, the student will reply to the threads of at least 2 classmates. Each reply must be no less than 20 words.

D. Individual Assignments (4)

Each Individual Assignment will have different instructions. The student will:

- 1. Compose a sentence regarding the significance of life.
- 2. Compose 2 sentences applying the scientific method.
- 3. Classify 10 research projects into 3 biological categories.
- 4. State and refine his or her notion of the place of environmental issues in church educational curriculum.

E. Quizzes (8)

Rather than a few comprehensive exams over the material, this course utilizes many quizzes, targeting smaller, specific content areas. Each quiz will be **open-book/open-notes**, contain 25 multiple-choice questions that come solely from the textbook, and have a time limit of 50 minutes. The student must review the learning outcomes, read what is assigned, and be certain he or she has engaged in all the assignments up to that point **before** taking each quiz. There are study guides for each quiz.

VII. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist		10
Discussion Board Forums (3 at 60 pts ea)		180
Individual Assignments (2 at 30 pts ea; 2 at 60 pts ea)		180
Quizzes (8 at 80 pts ea)		640
•	Total	1010

B. Scale

$$A = 900-1010$$
 $B = 800-899$ $C = 700-799$ $D = 600-699$ $F = 0-599$

C. Instructor Feedback and Response Time

Responses to student emails will be provided within 48 hours and assignment feedback will be given within 1 week from the assignment due date.

E. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

VIII. BIBLIOGRAPHY

- Behe, M. J. (2006). *Darwin's black box: The biochemical challenge to evolution*. New York, NY: Free Press. ISBN: 9780743290319.
- DeWitt, C. B. (2011). *Earthwise: A guide to hopeful creation care* (3rd ed.). Grand Rapids, MI: Faith Alive Christian Resources. ISBN: 9781592556724.
- DeWitt, D. A. (2007). *Unraveling the origins controversy*. Lynchburg, VA: Creation Curriculum, LLC. ISBN: 9780979632303.
- Halliday, J., & Halliday, A. (2002). *Thin within: A grace-oriented approach to lasting weight loss*. Nashville, TN: W Publishing Group. ISBN: 9780849908460.

VIII. QUALITY MATTERS SEAL OF APPROVAL

This certification mark recognizes that this course met Quality Matters Review Standards.



Quality Matters (QM) is a non-profit organization committed to quality assurance in Online Education. Courses that have received the QM Seal of Approval have passed rigorous reviews by Quality Matters evaluators and maintain their approval for five years.



COURSE SCHEDULE

BIOL 101

Textbook: Detwiler et al., Life by Design (2014).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Detwiler et al.: Text Sections 1.1–1.4; 2.1–2.3; 3.1–3.3; 4 Introduction, 4.1–4.2 7 presentations 1 document 1 study guide 1 article	Course Requirements Checklist Class Introductions Individual Assignment 1 Individual Assignment 2 Quiz 1	10 0 30 30 80
2	Detwiler et al.: Text Sections 4.3–4.5, 4.7; 5.1–5.2 5 presentations 1 study guide	DB Forum 1 Quiz 2	60 80
3	Detwiler et al.: Text Sections 6.1–6.7, 6.9–6.10; 7.1–7.2 12 presentations 1 study guide	Quiz 3	80
4	Detwiler et al.: Text Sections 7.3; 8.1–8.4, 8.6; 9.1, 9.3 7 presentations 1 study guide	Individual Assignment 3 Quiz 4	60 80
5	Detwiler et al.: Text Sections 10.1–10.9 7 presentations 1 study guide	Quiz 5	80
6	Detwiler et al.: Text Sections 11.1–11.3, 11.5; 12.1–12.5 7 presentations 1 study guide	DB Forum 2 Quiz 6	60 80
7	Detwiler et al.: Text Sections 13.1–13.3, 13.5 4 presentations 1 study guide	DB Forum 3 Quiz 7	60 80
8	Detwiler et al.: Text Sections 14.1–14.5; 15.1–15.3, 15.5, 15.7 6 presentations 1 study guide 1 website	Individual Assignment 4 Quiz 8	60 80
Total			1010

DB = Discussion Board

NOTE: Each course module/week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.