

**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 not 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**

An understanding of the basic characteristics of life is a significant asset to an individual. The individual lives among and relates to (with or without cognizance) myriads of life forms around, on, and within him/her. As he/she begins to appreciate the diversity and ecological significance of life forms he/she begins to function more effectively and sensitively within the sphere of dominion God has allotted him/her.

#### **I. PREREQUISITE**

For information regarding prerequisites for this course, please refer to the [Academic Course Catalog](#).

#### **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. Microsoft Office
- D. Software (“plug-ins”) to read Quicktime and Shockwave files (obtainable free online from Adobe and Quicktime 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, 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 [Student Expectations](#), 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 respond to prompts provided and post a thread, containing a maximum of 100 words, to the Discussion Board Forum. In addition to the thread, the student must submit 2 replies of at least 20 words to 2 classmates' threads.
- D. Individual Assignments (3)  
In Modules/Weeks 1 and 4, the student will:
  1. Compose and submit a sentence regarding significance of life.
  2. Compose 2 sentences applying the scientific method.
  3. Classify 10 research projects into 3 biological categories.

E. Quizzes (9)

Rather than a few comprehensive exams over the material, this course utilizes many quizzes targeting smaller, specific content areas.

1. Quizzes will contain multiple-choice questions that come solely from the textbook and will be **open-book/open-notes**. The quizzes will have a time limit of 50 minutes. The student should review the learning outcomes, read the assignments, and be certain he or she has engaged in all the assignments **before** taking these quizzes.

2. One final quiz will contain a single question requiring evaluation of the validity of 12 specific statement based on conclusions reached from a student discussion entitled, “The Church and its Role in the Environment” found on the course web site within module 8. The student should watch the presentation, “The Christian and His Environment” and review the student discussion **before** taking this 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; 1 at 60 pts)	120
Quizzes (8 at 80 pts ea; 1 at 60 pts)	700
<b>Total</b>	<b>1010</b>

B. Scale

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

C. Disability Assistance

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

**BIBLIOGRAPHY**

Behe, M. J. (1996). *Darwin's black box: The biochemical challenge to evolution*. New York: Free Press.

Detwiler, C. R., Mitchell, K., & Reichenbach, N. (2012). *Life by Design* (1st ed.). Mason, OH: Cengage Publishing Co.

DeWitt, C. B. (2011). *Earth-wise: A guide to hopeful creation care* (3rd ed.). Grand Rapids: Faith Alive Christian Resources.

DeWitt, D. A. (2007). *Unraveling the origins controversy*. Lynchburg, VA: Creation Curriculum, LLC.

Halliday, J., Halliday, A., & Rackets, S. (2002). *Thin within: A grace-oriented approach to lasting weight loss*. Nashville, TN: W Publishing Group.

## ***COURSE SCHEDULE***

### **BIOL 101**

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

<b>MODULE/ WEEK</b>	<b>READING &amp; STUDY</b>	<b>ASSIGNMENTS</b>	<b>POINTS</b>
<b>1</b>	Detwiler et al.: Text Sections 1.1–1.4; 2.1–2.3 3 presentations 1 document 1 study guide 1 article	Course Requirements Checklist Class Introductions Individual Assignment 1	10 0 30
<b>2</b>	Detwiler et al.: Text Sections 3.1–3.3; 4 Introduction, 4.1–4.2 4 presentations	Individual Assignment 2 Quiz 1	30 80
<b>3</b>	Detwiler et al.: Text Sections 4.3–4.5, 4.7 3 presentations 1 study guide	DB Forum 1 Thread	30
<b>4</b>	Detwiler et al.: Text Sections 5.1–5.2 2 presentations	DB Forum 1 Replies Quiz 2	30 80
<b>5</b>	Detwiler et al.: Text Sections 6.1–6.7 6 presentations 1 study guide	None	-
<b>6</b>	Detwiler et al.: Text Sections 6.9– 6.10; 7.1–7.2 6 presentations	Quiz 3	80
<b>7</b>	Detwiler et al.: Text Sections 7.3; 8.1–8.4 6 presentations 1 study guide	None	-
<b>8</b>	Detwiler et al.: Text Sections 8.6; 9.1, 9.3	Quiz 4	80

<b>MODULE/ WEEK</b>	<b>READING &amp; STUDY</b>	<b>ASSIGNMENTS</b>	<b>POINTS</b>
<b>9</b>	Detwiler et al.: Text Sections 10.1–10.4 5 presentations 1 study guide	Individual Assignment 3	60
<b>10</b>	Detwiler et al.: Text Sections 10.5–10.9 3 presentations	Quiz 5	80
<b>11</b>	Detwiler et al.: Text Sections 11.1–11.3, 11.5 2 presentations 1 study guide	None	-
<b>12</b>	Detwiler et al.: Text Sections 12.1–12.5 5 presentations	DB Forum 2 Thread Quiz 6	30 80
<b>13</b>	Detwiler et al.: Text Sections 13.1–13.2 1 presentation 1 study guide	DB Forum 2 Replies	30
<b>14</b>	Detwiler et al.: Text Sections 13.3, 13.5 3 presentations	DB Forum 3 Thread Quiz 7	30 80
<b>15</b>	Detwiler et al.: Text Sections 14.1–14.5 3 presentations 1 study guide 1 website	DB Forum 3 Replies	30
<b>16</b>	Detwiler et al.: Text Sections 15.1–15.3, 15.5, 15.7 3 presentations	Individual Assignment 4 Quiz 8	60 80
<b>Review</b>	—	Catch up on assignments, quizzes	-
<b>TOTAL</b>			<b>1010</b>

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**.