# INTRODUCTION TO LIFE SCIENCE

SI 2111 OL

# **Course Description**

This course serves as an introduction to the study of biology. Topics include cell structure and function, photosynthesis, cellular respiration, scientific classification, characteristics of the five kingdoms, and how living organisms interact with and depend on one another. Additional areas of emphasis include scientific writing, presentation, and application of the scientific method. (3 hours)

#### **Course Resources**

(INCLUDING REQUIRED TEXTS)

1. Johnson, George B. *Essentials of the Living World, 7th edition* (New York, NY: McGraw Hill, 2022), 796 pp. ISBN-13: 9781264407835, \$143.79.

### **College Mission**

The mission of Ozark Christian College is to train men and women for Christian service as a degree granting institution of biblical higher education.

## **College Learning Goal**

Graduates of Ozark Christian College will be grounded in Scripture, growing in Christlikeness, practicing cultural discernment, and vocationally prepared for Christian service.

# **College Learning Outcomes**

Ozark has identified learning outcomes for each area of the curriculum – General Education (GE), Biblical Education (BE), and Professional Education (PE). This course will directly address the following college learning outcomes:

#### **General Education Outcomes:**

- GE 2: Think critically from a Christian worldview.
- GE 3: Demonstrate skills necessary for lifelong learning.
- GE 5: Appreciate and responsibly engage the physical world and diverse cultures, both past and present.

#### **Course Goals**

- 1. This course is designed to teach students how to evaluate and apply scientific principles.
- 2. This course is designed to teach students to appreciate the Earth and everything in it as God's creation.
- This course is designed to teach students to interpret scientific information and present it in everyday language

### **Course Objectives**

Upon completion of this course, a student should be able to:

- 1. Discuss the fundamentals of the chemical and cellular nature of living things. (GE5)
- 2. List several examples of the interdependence of living organisms. (GE 5)
- 3. Understand how to apply critical thinking to discern differing opinions. (GE 2, GE 3)
- 4. Apply the scientific method to problem solving. (GE 2, GE 3)
- 5. Demonstrate knowledge of the basic laws of inheritance. (GE 5)

# **Information Literacy**

Ozark Christian College is committed to information literacy training. This training will be intentional, incremental, and missional. Students will learn to access, evaluate, and utilize pertinent information in their ministry preparation.

#### **ADA Accommodation**

If you have a disability and are requesting an accommodation, please contact the Director of Academic Operations at 417-626-1222 as soon as possible.

# **Online Course Policies**

#### **Turnitin**

Turnitin services will be used at the instructor's discretion. Instructors may use Turnitin for the detection of plagiarism and inappropriate use of artificial intelligence (such as ChatGPT). Students may use Turnitin to check for improper citation and potential plagiarism before an assignment is submitted to an instructor. See assignment settings inside Canvas for available features in a specific course.

#### **OCC Student Email Address**

All Ozark Christian College students must use the official e-mail address provided by the college (lastname.firstname@my.occ.edu) to receive communication from the faculty and staff. The OCC student email address may be forwarded to another email service (e.g. yahoo.com or hotmail.com). **Email will be the professor's chosen method of communication with the student in this course, so check your email regularly.** 

# **Online Course Refund Policy**

Refunds of tuition and certain fees may be made upon official withdrawal of any student according to the table below. To receive a refund adjustment for any classes dropped (assessed on a case-by-case basis), the student should contact the Assistant Director of Digital Learning at donato.jason@occ.edu.

See the website for specific dates.

Week 1: Monday-Sunday	100% refund
Week 2: Monday-Sunday	75% refund
Week 3: Monday-Sunday	50% refund
Week 4: Monday-Sunday	0% refund

### **Online Course Drop Policy**

Online courses dropped during the first seven days of the course will not be recorded on the student's transcript. Any student who wishes to withdraw from a class after the Add/Drop period must notify the Registrar's Office and formally request to be withdrawn from the class(es). Until this is done, the student is officially enrolled in the class whether or not he/she participates. Likewise, the student is responsible for appropriate charges and coursework until he/she is officially removed from the course.

Online courses withdrawn after the seventh day but before the sixth week of the course will be recorded as a "W" on transcripts. This grade will not be calculated in the student's GPA but will impact financial aid Satisfactory Academic Progress. After five weeks, students cannot drop or withdraw from online courses and grades will be issued based on course performance. The only exception is for reasons approved by the Academic Dean.

#### **Online Course Attendance**

Online courses often demand greater discipline and careful attention to details within a compressed period of time compared to on-campus courses. Students are strongly advised to remain in close contact with their online instructor in the event that they must be absent for a brief period of time. Attendance in online courses will be taken on a weekly basis. Students will be expected to actively participate according to the individual course syllabus.

Participation may include, but not be limited to: submitting written assignments, posting in graded forum discussions, completing exams, and written communication with the instructor directly related to the course. Online students who do not participate in the above ways for seven consecutive days (Monday thru Sunday) will be considered absent. Students are permitted a maximum of one absence.

The following scenarios may negatively impact a student's academic record and financial aid opportunities.

1. Being administratively dropped due to lack of login or participation within the first seven days of an online course. Digital Learning Department personnel will contact students via their OCC student email account and/or current phone number to assist them prior to this deadline.

- 2. Missing twelve consecutive days (starting on Monday). After the twelfth day, the student will be contacted by the instructor via the student's OCC email account. Instructors will promptly convey this information to Digital Learning personnel. The student will be given 48 hours to communicate his/her intentions. Those who do not respond, or who do not wish to continue in the course, will be administratively withdrawn.
- 3. Acquiring a second absence after the fifth week. Students who exceed the absence limit (one) without the consent of the online instructor will fail the course. If a student exceeds the absence limit within the first five weeks, he/she may elect to withdraw from the course.

### **Assignment Submission**

All assignments will be facilitated through our Canvas course site. You may post replies to the discussions forums, as well as take quizzes and exams. For written assignments, save documents in either .doc, .docx, .pdf, or .rtf format (or as otherwise indicated by your instructor) and upload them to the Canvas site.

#### **Late Work**

Assignments are due on Thursday and Sunday by <u>11:59 pm Central Standard Time</u>. Late work may or may not be accepted, at the discretion of the teacher. Any grade deductions will be assessed on a case-by-case basis. If you have a question about a particular assignment, please contact the teacher well ahead of the deadline.

# Responses to Your Work

You may generally expect replies to personal communication (email, Canvas inbox) within 24-48 hours. For written assignments, the professor will endeavor to grade and give feedback within seven days of the due date.

# **Academic Honesty**

Due to the commitment of training men and women for Christian service and the commitment of educational excellence, academic integrity is our natural expectation. Compelling evidence of academic dishonesty (e.g. cheating or plagiarism) will be reported to the Academic Dean's office. Penalties could range from failure of an assignment to suspension from college. Students should avoid dishonesty and irresponsibility at all costs.

**Plagiarism:** Submitting as part or all of one's own work material that is copied or paraphrased from another source, including online sources, without the proper acknowledgment of the source. Examples include failing to cite a reference, failing to use quotation marks where appropriate, misrepresenting another's work as your work, or using text written by a generation system as one's own (i.e., entering a prompt into an artificial intelligence tool and using the output in a paper).

# **Required Course Tools/Connectivity**

Successful participation in this course requires the student to possess or obtain (and know how to use) the following in addition to course books:

One fully functional and adequately performing desktop or laptop computer, free of known

viruses.

- A word processor that can publish or save into .doc, .docx, .pdf, or .rtf format.
- Access to your @my.occ.edu email address.
- Daily access to a reliable internet connection of at least 1MB/s speed.
- A webcam and mic (typically integrated on most laptops).

### **Course Topic Outline and Workload**

In keeping with standards typical of higher education, the expectation is that you will spend between 112 to 135 hours completing all coursework in this 3-hour online course.

Module	Topics Covered	Hrs./Min. Covered
1	Introduction to Biology	13.25 hr.
2	Cell Structure & Function	15 hr.
3	Cell Division & Genetics, part 1	18.75 hr.
4	Cell Division & Genetics, part 2	11.5 hr.
5	Natural Selection & Evolution	14 hr.
6	Classification of Living Organisms	15.5 hr.
7	Interactions of Living Organisms	14 hr.
8	Human Environment Impact	12 hr.
Total Hou	rs Students will Spend Working on Course	114 hr.

# **Grades**

Below is a listing of assignments that comprise the 100% percentage points possible for this course.

Assignment	Grade	Course Objectives
Activities	35%	3, 4, 5
Quizzes	15%	3
Discussions	25%	1, 2, 3, 4
Papers	25%	2, 3
Total Points	100%	

# **Grading Scale**

Total Score	Course Grade	Value
100-95 points	А	4.0
94-90 points	A-	3.67
89-87 points	B+	3.33
86-83 points	В	3.00
82-80 points	B-	2.67
79-77 points	C+	2.33
76-73 points	С	2.00
72-70 points	C-	1.67
69-67 points	D+	1.33
66-63 points	D	1.00
62-60 points	D-	0.67

59-0 points	F	0.00			
For further information on grading policies, refer to the					
college catalog.					