

**Valdosta State University, BIOL 1108K, Sections H-O (4 Credit Hours)**  
**Principles of Biology II, SPRING 2018**  
**Syllabus and Course Policies**

Lecture: BSC 1011 – MW 3:30-4:45 PM

Lecture Instructor: Eric Chambers (Dr. Chambers); Office: BSC 2214 Phone: 229-249-2736

Email: [ewchambers@valdosta.edu](mailto:ewchambers@valdosta.edu)

Office Hours: Tuesdays and Thursdays @10:00 – 11:30 AM

Graduate Assistant (GA): Dariana Rodriquez

Embedded Tutors: TBA

Lab Sections: BSC 1073

F, Tuesday, 2:00 – 4:50 PM, Dr. Chambers

FF, Tuesday, 2:00 – 4:50 PM, Dr. Chambers

G, Wednesday, 8:00 – 10:50 AM, Dr. Chambers

GG, Wednesday, 8:00 – 10:50 AM, Dr. Chambers

H, Wednesday, 11:00 AM – 1:50 PM, Dr. Calestani

HH, Wednesday, 11:00 AM – 1:50 PM, Dr. Calestani

I, Thursday, 1:00 – 3:50 PM, Dr. Goddard

J, Friday, 9:00 – 11:50 AM, Dr. Calestani

**Course Description:** An introduction to physiological processes in plants and animals. The course will explore topics in organismal structure, nutrition, transport, coordination, reproduction, and development.

**Required Materials:**

Lecture Textbook: Life: The Science of Biology 11<sup>th</sup> edition. This text is available in a variety of formats (shown in table below). You only need to purchase **one** of these three versions. All are available in the VSU bookstore. If you elect to use another vendor please make sure that you purchase the 11<sup>th</sup> edition and that it includes LaunchPad access.

| ISBN          | Format                       | Edition | Author |
|---------------|------------------------------|---------|--------|
| 9781319126193 | LoosePgs w/LaunchPad Access  | 11th    | Sadava |
| 9781319125714 | Hardcover w/LaunchPad Access | 11th    | Sadava |
| 9781319025311 | eBook w/LaunchPad Access     | 11th    | Sadava |

Interactive Response System: Turning Technologies QT Clicker Device & Turn Tech 1yr Acct

Lab Textbook: Grove, T. 2011. Principles of Biology Laboratory Manual for BIOL 1108.

**ISBN:** 9781680750201

**Course goals:** The purpose of this course is to provide you with a broad introduction to the study of biology. The course is introductory and topical in nature but upon completion of this course you will be prepared for advanced specialized courses in biology. It will also provide you with a background to better understand many of the technological issues and challenges confronting our nation and the world.

This course will focus on understanding the physiology of major systems in plants and animals. You will learn common experimental tools and techniques used in physiology. An emphasis will be placed on learning how to analyze basic biological data using quantitative tools such as Excel.

This course will assist you in developing communication skills as well as information processing skills. These abilities are critical for all students, both those who wish to attend professional school (medical, dental, etc.) and graduate school as well as those who will move directly into the job market following graduation. Your critical thinking skills will be enhanced through analysis of lab exercises, class assignments, and test questions.

### **Educational outcomes: Listed at the end of syllabus**

#### **Explanation of Lecture Assignments:**

**Lecture Exams:** A total of 4-unit exams and one cumulative final exam will be given during the semester. The dates are included in the tentative schedule at the end of the syllabus. All exams, including the final, will be multiple-choice. The lowest exam grade will be dropped. There are no make-up exams, regardless of excuse. If you miss an exam, this will be the grade that is dropped. Students may not take exams early, with the exception of students with a university-related or religious excuse. The unit exams are not cumulative.

**Clicker questions:** In this course you will utilize “clicker” technology in order to be more engaged with the material during lecture. Clicker questions will provide you a chance to receive immediate feedback on your understanding and interpretation of important biological principles. Clicker questions will begin during the second week of class.

Grading on clicker questions will be 1 point for an answer and 0 points for not answering (for any reason-including but not limited to dead battery, forgot clicker, absent from class). Individual clicker assessments will be posted to Blazeview following the lecture.

**LearningCurve online assignments:** LearningCurve is an adaptive quizzing and personalized homework program available at the LaunchPad web site. LearningCurve adaptive quizzing gives each student individualized question sets and feedback based on their correct and incorrect responses. All the questions link back to the e-book to encourage students to read the book in preparation for class-time and exams. You are to complete a LearningCurve assignment for each textbook chapter that we cover. Exam dates serve as the deadline. In other words, if exam #1 covers chapters one through four you would have until the exam date to complete the assignment for all four chapters. **I strongly suggest you complete the LearningCurve assignments before we discuss the chapter in lecture.** LearningCurve assignments are completed by attaining a **Target Score** established by the instructor. The number of question you must complete are based upon your ability to select the correct answer for each question. **Grading on LearningCurve will be 4 points for achieving the Target Score and 0 points for not achieving the Target Score.**

#### **Lecture Grade:**

1. Lecture Assignments (component 1; 25% of lecture grade): Add up all points earned from LearningCurve Assignments and all clicker points earned and divide by the total number of

clicker and LearningCurve points possible. Multiply by 100 to get a percentage. Multiply this percentage by 0.25 (25%).

2. Lecture Exams (component 2; 75% of lecture grade): Drop your lowest exam score (out of four unit exams and the final exam). Add up the remaining four exam scores and divide by 400. Multiply by 100 to get a percentage. Multiply this percentage by 0.75 (75%).

3. Final Lecture grade: Add component 1 + component 2. This will give you a lecture percentage score between 0-100.

Overall course grade:

1. Lecture grade (75% of course grade): Take the final percentage grade from step 3 above and multiply by 0.75 (75%).

2. Lab grade (25% of course grade): Take your final percentage grade from lab and multiply this percentage by 0.25 (25%).

3. Add the lecture grade and lab grade together. This will give you a percentage score between 0-100.

Grade Scale: For Biology majors a grade of C or higher is required for this course.

A 90-100%

B 80-89%

C 70-79%

D 60-69%

F < 60%

**Notes on grading:** Students should note that a grade of "A" in this course represents an exemplary command of the material covered. To obtain this grade of excellence, it is recommended that students study daily and clarify with their instructor any problems regarding course information, as they arise.

**Biology Tutoring:** The Student Success Center (SSC) at Valdosta State University is located in Langdale Residence Hall above the Tech Shop and is available to all students. The SSC provides free peer tutoring in core curriculum courses, including biology, chemistry, math, writing, and foreign languages. The SSC also provides free professional academic advising and on-campus job information in one location. Call 333-7570 to make an appointment, or visit the website: [www.valdosta.edu/ssc](http://www.valdosta.edu/ssc).

### **General Rules:**

**Attendance:** Attendance in lecture is **expected** of all students. You will not earn clicker lecture points unless you attend lecture. You will have difficulty passing this course if you do not consistently attend lecture! Attendance in laboratory is **mandatory**; see lab syllabus from your lab instructor.

**Academic conduct:** Cheating and plagiarism will not be tolerated and may result in a failing grade for the assignment, exam or the class.

**Lecture Conduct:**

- Arrive on time.
- Turn off/silence cell phones during class and lab.
- Remove headphones and earbuds while in lecture, lab, and during exams.
- Don't talk during lecture except during active learning exercises or asking a question
- Avoid leaving class early
- You and you alone use your clicker in class. If your clicker is found in the possession of another student both of you will lose all your clicker points for the semester!

**Procedure for exams:**

- No books, electronic devices, or notebooks will be allowed during exams and students using such items will be asked to leave and will receive a zero for the exam.
- No talking will be allowed during the exam, but students are permitted to ask the instructor questions.
- Each student will be given an exam to be completed and handed back to the instructor.
- Students must bring a pencil and will take the exam during the stated lecture time only.
- **NOTE:** You will have the class time only to complete each lecture exam.

**Student identification:** Students should have in their possession at all times their VSU student identification card. Because of the large size of the class this semester we will be checking student ID or another form of picture ID during exams.

**Privacy Act (FERPA):** The Family Educational Rights and Privacy Act (FERPA) prohibits the public posting of grades by social security number or in any manner personally identifiable to the individual student. No grades can be given over the telephone or over email because positive identification can't be made.

**Access Statement:** Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: [access@valdosta.edu](mailto:access@valdosta.edu).

**Title IX Statement:** Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, [titleix@valdosta.edu](mailto:titleix@valdosta.edu), 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

**Tentative Lecture and Exam Schedule, BIOL 1108K, Sections F-J, Spring 2018**

| <b>Date</b>    | <b>Topic</b>                                   | <b>Chapter</b>            |
|----------------|--|---------------------------|
| Jan. 8         | Course Intro; Review                           | --                        |
| Jan. 10        | Introduction to Phylogenies                    | 21                        |
| Jan. 15        | Martin Luther King Jr. Holiday-No class        | --                        |
| Jan. 17        | Intro to Physiology and Homeostasis            | 39                        |
| Jan. 22        | Animal Hormones                                | 40                        |
| Jan. 24        | Animal Hormones                                | 40                        |
| Jan. 29        | Animal Reproduction                            | 42                        |
| Jan. 31        | Animal Reproduction                            | 42                        |
| Feb. 5         | Neurons and Nervous System                     | 44                        |
| Feb. 7         | Neurons and Nervous System                     | 44                        |
| <b>Feb. 12</b> | <b>Exam #1</b>                                 | <b>21, 39, 40, 42, 44</b> |
| Feb. 14        | Musculoskeletal                                | 47                        |
| Feb. 19        | Gas Exchange                                   | 48                        |
| Feb. 21        | Circulatory System                             | 49                        |
| Feb. 26        | Nutrition and Digestion                        | 50                        |
| Feb. 28        | Salt and Water Balance                         | 51                        |
| Mar. 5         | Salt and Water Balance                         | 51                        |
| <b>Mar. 7</b>  | <b>Exam #2</b>                                 | <b>47, 48, 49, 50, 51</b> |
| Mar. 12        | Spring Break – No Class                        | --                        |
| Mar. 14        | Spring Break – No Class                        | --                        |
| Mar. 19        | Seedless Plants                                | 28                        |
| Mar. 21        | Seedless plants; plants with seeds             | 28,29                     |
| Mar. 26        | Plants with seeds                              | 29                        |
| Mar. 28        | The Plant Body                                 | 34                        |
| Apr. 2         | The Plant Body                                 | 34                        |
| Apr. 4         | Transport in Plants                            | 35                        |
| <b>Apr. 9</b>  | <b>Exam #3</b>                                 | <b>28, 29, 34, 35</b>     |
| Apr. 11        | Plant Nutrition                                | 36                        |
| Apr. 16        | Regulation of Plant Growth                     | 37                        |
| Apr. 18        | Regulation of Plant Growth; Plant reproduction | 37,38                     |
| Apr. 23        | Reproduction in Flowering Plants               | 38                        |
| Apr. 25        | Plant responses and Environmental Challenges   | 39                        |
| <b>Apr. 30</b> | <b>Exam #4</b>                                 | <b>36,37,38,39</b>        |
| <b>May 3</b>   | <b>Final Exam</b>                              | <b>Cumulative</b>         |

#### Valdosta State University General Educational Outcomes (GEO)

1. Students will demonstrate understanding of the society of the United States and its ideals.
2. Students will demonstrate cross-cultural perspectives and knowledge of other societies.
3. Students will use computer and information technology when appropriate.
4. Students will express themselves clearly, logically and precisely in writing and in speaking, and they will demonstrate competence in reading and listening.
5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices.
6. Students will demonstrate knowledge of diverse cultural heritages in the arts, the humanities, and the social sciences.
7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written and visual materials.
8. Students will demonstrate knowledge of principles of ethics and their employment in the analysis and resolution of moral problems.
9. Students will demonstrate understanding of the physical universe and the nature of science, and they will use scientific methods and/or mathematical reasoning and concepts to solve problems.

#### Department of Biology Educational Outcomes (BEO)

1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral format used in peer- reviewed journals and at scientific meetings.
2. Describe the evolutionary process responsible for biological diversity, explain the phylogenetic relationships among the other taxa of life, and provide illustrative examples.
3. Demonstrate an understanding of the cellular basis of life.
4. Relate the structure and function of DNA/RNA to the development of form and function of the organism and to heredity
5. Interpret ecological data pertaining to the behavior of the individual organism in its natural environment; to the structure and function of populations, communities, and ecosystems; and to human impacts on these systems and the environment.