

BIOL 1108: Principles of Biology I
Department of Biology,
College of Math and Science
Valdosta State University
Spring 2023, Syllabus and Course Policies

Lecture: Bailey Science Center, Room 1011 – MW 3:30-4:45 PM

Section A: CRN# 24674 (3 credit hours)

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

Email: ewchambers@valdosta.edu

Office Hours: Bailey Science Center, Room 2214; Tuesday and Thursday 3:00-4:0 PM or by appointment

Graduate Assistant (GA): Kamajah Jones

Peer Alliance (PAL) Facilitator: Julia Higdon, jrhigdon@valdosta.edu; former student who attends lectures and assists students as a learning coach to master and apply concepts covered in class by holding additional tutoring sessions.

Course Description: An introduction to physiological processes in plants and animals. Structure, nutrition, transport, coordination, reproduction, and development will be addressed.

Attendance: Please note that attendance at lectures is mandatory in this course in order to earn the required iClicker points. You must attend 80% of lectures with iClicker questions in order to receive full iClicker credit.

Required Materials: This course is participating in the Day 1 Textbook Savings Program. Your course materials may be accessed digitally through your Blazeview account on the first day of class. Although an optional print copy of the book is available at the campus bookstore, NO other purchase is necessary. Your course material charge is included in your student bill and guarantees the lowest cost available for the textbook and the Achieve learning system. Your course materials include the following:

- 1. Textbook:** We will be using the textbook, Biology 2e, provided by OpenStax, a 501(c)(3) nonprofit charitable corporation associated with Rice University in Texas. You will be able to access the digital version of this textbook through a link in Blazeview. You can also access this textbook outside of Blazeview using this link: <https://openstax.org/details/books/biology-2>
- 2. Achieve on-Line learning system:** This is an online learning system through Macmillan publishing that is integrated into Blazeview. It offers assessment tools and content to support you in your learning and understanding of the material. There will be frequent online homework assessments that you will complete to assist you in learning the material and preparing for exams. The OpenStax digital textbook is integrated into the Achieve platform. All of this is easily accessible through the Blazeview LMS.
- 3. iClicker Cloud rapid response system:** This semester we will be using the iClicker student engagement system. This is integrated into the Achieve learning system and there will be a

nominal add-on charge in order to purchase a one semester subscription. The iClicker system allows you to engage directly with the course content during lecture by having you complete student polls that quiz you on the material being covered in real time. The iClicker Cloud allows you to participate using your mobile phone, laptop, or tablet device. Instructions on how to register for this system will be given in the first lecture.

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 semester we will focus on understanding the physiology of 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.

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.

<u>Assessments:</u>	<u>Percent of grade</u>
o Exams (including final)	70%
o iClicker questions	15%
o Achieve Homework	15%
o Extra Credit	To be determined

Explanation of Lecture Assignments:

Lecture Exams: Students will have 75 minutes to complete each exam

A total of 4-unit exams will be given during the semester. The dates are included in the tentative schedule at the end of the syllabus. All exams will be in a multiple-choice format. **I typically allow make-up exams for university-related events or approved medical/personal issues.** If you become ill, please email me ASAP. If you know you will miss an exam for a university-related reason, please contact me ahead of time to discuss an appropriate date for scheduling your make-up exam. **All missed exams must be taken within 1-week of the original exam date and missed exams cannot be taken during regular scheduled lecture time.**

Achieve Quizzes: There will be a HW assignment for each chapter covered during the semester which will be administered through the Achieve learning platform. The due dates will be announced in class and posted to the Calendar in Blazeview. Your 10 highest homework grades will count towards your course homework grade. These assignments are open book and you are given multiple opportunities to answer each question but your score is reduced by 0.5% each time you miss a question. Question formats will be varied and will include: multiple choice, labeling, ranking, and other types of questions. It is very important that you organize your

schedule so that you know when each assignment is due and that you give yourself sufficient time to complete each assignment.

iClicker Polling Questions: In this course we will utilize iClicker Cloud polling technology to increase class engagement during lecture. Polling questions will provide you a chance to receive immediate feedback on your understanding and interpretation of important biological principles. Polling questions will begin the second week of class.

The number of iClicker questions could vary per lecture. You will receive 1 point for each poll question that you answer in class (correctly or incorrectly). You must answer at least 50% of the iClicker questions during a given class session in order to earn full credit (5 points) for that day. You need to answer iClicker questions for 80% of the lectures. So you are able to miss 4 lectures and still earn 100% of the iClicker points.

It is **your** responsibility to remember your device (phone, laptop, tablet) and to make sure it is charged. **Do not come up to me after class to tell me you were in class, or to give me a piece of paper with the responses. You only earn the points by responding using the web-based system! You are responsible for troubleshooting any technical issue you are experiencing and you should immediately reach out to iClick technical support if you have issues. I will also be available to assist you after you reach out to them.**

I will provide you with a link for iClicker Cloud in Blazeview and we will discuss how to set up an account during the first lecture.

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 Academic Support Center (ASC) at Valdosta State University is located on the second floor of the Odum Library. The ASC provides free peer tutoring in core curriculum courses, including biology, chemistry, math, writing, and foreign languages. The ASC also provides periodic workshops covering topics such as time management and study skill development. Call 333-7570 to make an appointment, or visit their website at <https://www.valdosta.edu/asc/>

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

- Quickly find your seat
- 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
- The iClicker questions are only to be answered by those who are physically present in the lecture hall. This means do not email, text, instant message, or communicate with those who are not in lecture in order to assist them in answering iClicker questions.

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.

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@valosta.edu, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

Campus Gun Carry Statement (HB 280): If you choose to carry a concealed weapon on campus, you are responsible for knowing and following the law. Refer here for FAQ:

<https://www.valdosta.edu/administration/finance-admin/police/campuscarry/>

Tentative Lecture Schedule, BIOL 1108, Section A, Spring 2023

Date	Topics	Chapter
Jan 9	Syllabus; Phylogenies and History of Life	Syllabus; 20
Jan. 11	Phylogenies and History of Life	20
Jan. 16	No Class – Martin Luther King, Jr. Holiday	–
Jan. 18	Animal Body: Basic Form and Function	33
Jan. 23	Animal Nutrition and the Digestive System	34
Jan. 25	Animal Nutrition and the Digestive System	34
Jan. 30	Nervous System	35
Feb. 1	Nervous System	35
Feb. 6	Exam #1	(Ch. 20, 33, 34, 35)
Feb. 8	Endocrine System	37
Feb. 13	Endocrine System	37
Feb. 15	Musculoskeletal System	38
Feb. 20	Respiratory System	39
Feb. 22	Respiratory System	39
Feb. 27	Circulatory System	40
Mar 1	Circulatory System	40
Mar. 6	Exam #2	(Ch. 37, 38, 39, 40)
Mar. 8	Osmotic Regulation and Secretion	41
Mar. 13-17	No Class-Spring Break	--
Mar. 20	Immune System	42
Mar. 22	Immune System	42
Mar. 27	Animal Reproduction and Development	43
Mar. 29	Animal Reproduction and Development	43
April 3	Seedless Plants	25
April 5	Seedless Plants	25
April 10	Exam #3	(Ch. 41, 42, 43, 25)
April 12	Seed Plants	26
April 17	Plant form and Physiology	30
April 19	Soil and Plant Nutrition	31
April 24	Plant Reproduction	32
April 26	Plant Reproduction	32
May 1	Exam #4	(Ch. 26, 30, 31, 32)
May 4 (Thursday)	Final Exam (2:45-4:45 pm)	

***Key Dates :**

January 12, 2023 - Registration for Spring semester ends (11:59 pm)

January 16, 2023 – Martin Luther King, Jr. Holiday (University closed/no classes)

March 9, 2023 – Withdrawal deadline for full-term VSU courses Spring 2022

March 13-17, 2023 – Spring break

May 4, 2023 – Final Exam 2:45-4:45 PM

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.