BIOL 1108: Principles of Biology II
Department of Biology,
College of Math and Science
Valdosta State University
Spring 2024, Syllabus and Course Policies

Section A: CRN# 24674 (3 credit hours)
Lecture: Bailey Science Center, Room 1023 – TR 2:00-3:15 PM
Instructor: Eric Chambers (Dr. Chambers) Office: BSC 2214 Phone: 229-249-2736
Email: ewchambers@valdosta.edu

Office Hours: ; Bailey Science Center, Room 2214; Tuesday/Thursday 1:15-2:15 PM

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 and answer iClicker questions in 80% of lectures 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**: We will be using the iClicker student engagement system. This is integrated into the Achieve learning system. The iClicker system allows you to engage directly with the course content during lecture by participating in 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.

Technology Statement: In this class, students will regularly use the following applications:

1. Office 365 for access to VSU email and to Microsoft applications that we will use regularly (Outlook, Teams, Word, Excel, PowerPoint, etc.).

2. BlazeVIEW to access course materials

3. Achieve on-line learning system and iClicker Cloud response system as described above.

Although students can use their mobile phones to access these applications it might be preferably for to use a laptop or desktop computer. Computer labs can be found in Bailey Science Center, rooms 3018 and 3019.

IT provides a list of recommended technologies at https://www.valdosta.edu/administration/it/helpdesk/personal-devices/recommended-technologies.php

VSU students may download and install Microsoft Office 365 on up to 5 personal devices (https://www.valdosta.edu/administration/it/helpdesk/employee-resources/employee-services/work-at-home-tech-guide.php)

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.

Assessments:	Points
○ Exams	400
○ iClicker questions	100
○ Achieve Homework	100
○ Extra Credit (TBA)	30
○ **Total**	**600**

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.

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
- Turn off/silence cell phones during class and lab.
- Remove headphones and earbuds while in lecture and during exams.
- Don't talk during lecture except during active learning exercises or asking a question
- Avoid leaving class early
- iClicker questions only answered by those physically present in the lecture hall. Do not email, text, instant message, or communicate with those not in

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
- 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.

SOI Syllabus Statement: At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators, and they will be able to access results only after they have submitted final grades. Before final grade submission, instructors will not be able to see any responses, but they can see the percentage of students who have or have not completed their SOIs. While instructors will not be able to see student names, an automated system will send a reminder email to those who have yet to complete their SOIs. Complete information about the SOIs, including how to access the survey, is available on the SOI Procedures webpage (https://www.valdosta.edu/academics/academic-affairs/sois/).

Student identification: Students should have in their possession at all times their VSU student identification card. In order to verify the identification of students officially enrolled in the course, it is the instructor's prerogative to request official student photo identification cards at any time during lecture. During examinations, students will routinely be asked to display their VSU student identification cards visibly on the desktop and to make them available for inspection by their instructor and/or assistants.

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.

Accommodations Statement: Students with disabilities who are experiencing barriers in this course may contact the Access Office (https://www.valdosta.edu/student/disability/) for assistance in determining and implementing reasonable accommodations. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu. To request reasonable accommodations for pregnancy and childbirth, contact Ms. Myia Miller, Title IX Compliance Officer, at maburden@valdosta.edu. Please note, you will be required to provide documentation from an appropriately licensed medical professional indicating the requested accommodations are medically necessary.

Non-Discrimination and Title IX Statement: Valdosta State University (VSU) upholds all applicable laws and policies regarding discrimination on the basis of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity or expression, national origin, religion, age, veteran status, political affiliation, or disability. The University prohibits specific forms of behavior that violate Title IX of the Education Amendments of 1972. Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs and activities that receive federal funding. VSU considers sex discrimination in any form to be a serious offense. Title IX refers to all forms of sex discrimination committed against others, including but not limited to: sexual harassment, sexual assault, sexual misconduct, and sexual violence by other employees, students or third parties and gender inequity or unfair treatment based on an individual's sex/gender. The designated Title IX Coordinator for VSU is Ms. Selenseia Holmes. To view the full policy or to report an incident visit: https://www.valdosta.edu/administration/student-affairs/title-ix/

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, Fall 2023

Date	Topics	Chapter
Jan. 9	Syllabus	Syllabus
Jan. 11	Phylogenies and History of Life	20
Jan. 16	Animal Body: Basic Form and Function;	33
Jan. 18	Animal Nutrition and the Digestive System	34
Jan. 23	Animal Nutrition and the Digestive System	34
Jan. 25	Nervous System	35
Jan. 30	Nervous System	35
Feb. 1	Endocrine System	37
Feb. 6	**Exam #1**	**(Ch. 20, 33, 34, 35)**
Feb. 8	Endocrine System	37
Feb. 13	Musculoskeletal System	38
Feb. 15	Respiratory System	39
Feb. 20	Respiratory System	39
Feb. 22	Circulatory System	40
Feb. 27	Circulatory System	40
Feb. 29	Osmotic Regulation	41
Mar. 5	Osmotic Regulation	41
Mar. 7	**Exam #2**	**(Ch. 37, 38, 39, 40)**
Mar. 12	**Spring Break**	--
Mar. 14	**Spring Break**	--
Mar. 19	Immune System	42
Mar. 21	Immune System	42
Mar. 26	Animal Reproduction and Development	43
Mar. 28	Animal Reproduction and Development	43
Apr. 2	Seedless Plants	25
Apr. 4	**Exam #3**	**(Ch. 41, 42, 43)**
Apr. 9	Seedless Plants	25
Apr. 11	Seed Plants	26
Apr. 16	Seed Plants	26
Apr. 18	Plant form and Physiology	30
Apr. 23	Plant form and Physiology	30
Apr. 25	Soil and Plant Nutrition	31
Apr. 29	Soil and Plant Nutrition	31
May 1	**Exam #4**	**(Ch. 25, 26, 30, 31)**

***Key Dates:**
January 11, 2024 - Registration for Spring semester ends (11:59 pm)
January 15, 2024 – Martin Luther King Jr. Holiday (University closed/no classes)
February 29, 2024 – Official midterm, Fall 2023
March 7, 2024 – Withdrawal deadline for full-term VSU courses Spring 2024
March 11-15, 2024 – Spring Break
April 29, 2024 – Last official day of classes Spring 2024
May 1, 2024 – Exam 4 2:45-4:45 PM

BIOL 1108: General Principles of Biology II

This is a Core IMPACTS course that is part of the Technology, Mathematics & Sciences area.
Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Inquiry and Analysis
- Problem-Solving
- Teamwork

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.