

Valdosta State University, BIOL 1107K, Sections H-O (4 Credit Hours)
Principles of Biology I, FALL 2017
Syllabus and Course Policies

Lecture: BSC 1011 – TR 3:30-4:45 PM

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

Email: ewchambers@valdosta.edu

Office Hours: TR @2:00 – 3:00

Graduate Assistant (GA): TBA

Embedded Tutors: TBA

Lab Sections: BSC 1085 G, Monday, 9:00 am – 11:50 am, Dr. Chambers
H, Wednesday, 8:00 am – 10:50 am, Dr. Chambers
I, Wednesday, 11:00 am – 1:50 pm, Dr. Calestani
J, Wednesday, 2:00 pm – 4:50 am, Dr. Calestani
K, Thursday, 8:00 am – 10:50 am, Dr. Nienow
L, Thursday, 11:00 am – 1:50 pm, Dr. Kang

Course Description: An introduction to the principles of biology for science majors, with an emphasis on the cellular basis of life, genetics, and evolution. Concepts the course will focus on will include (but not be limited to): the origin and early evolution of cellular life; cell structure, function, metabolism and reproduction; cell signaling; and gene function in bacteria and eukaryotes.

Required Materials:

Lecture Textbook: Life: The Science of Biology 11th 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 11th 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

A device for the Interactive Response System (select one of the two options)

- a) Turning Technologies QT Clicker Device & Turn Tech 1yr Acct (approx. \$49.98)
- b) Turning technologies Mobile phone app & 1 yr. account (approx. \$24.99)

Lab Textbook: R.H. Goddard. 2011. Methods and Investigations in Basic Biology. Sixth Edition. Hayden-McNeil Publishing, Plymouth, MI. (Lab manual)

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 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

Assessments:

Lecture (75% of final grade)

• Lecture grade (lowest grade dropped)	<u>Points</u>
○ Unit Exams + Final exam	500
○ Lecture assignments	100
Clicker questions + LearningCurve Assignments	

Total possible points = 500 (after lowest exam is dropped)

Lab (25% of final grade)

- Refer to your lab syllabus for assessment details

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 of the five exam grades 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, clicker left at home, absent from class, etc.). Individual clicker assessments will be posted to Blazevue 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.**

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.

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.

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.

***Key Dates :**

August 13, 2018 - Registration for fall ends (11:59 pm)

October 11, 2018 - last day to withdraw from a class for fall semester 2017.

December 7, 2018 - Course final exam (2:45 - 4:45 pm)

Tentative Lecture Schedule, BIOL 1107K, Sections G-L, Fall 2018

Week of	Topics	Chapter
Aug 13-17	Introduction and Studying Life	1
Aug 20-24	Chemistry of Life; Macromolecules	2,3
Aug 27-31	Macromolecules	3
Sept 3-7	Labor Day ; Nucleic Acids and Origin of Life	4
Sept 10-14	Exam #1 (Sept. 11) ; Cells	5
Sept 17-21	Cells; Cell membranes	5, 6
Sept 24-28	Cell membranes; Cell communication	6,7
Oct 1-5	Cell communication 7; Exam #2 (Oct. 4)	7
Oct 8-12	Fall Break (No Classes Oct. 8 and 9) ; Enzymes	8
Oct 15-19	Enzymes; Cellular Respiration	8, 9
Oct 22-26	Photosynthesis; Cell cycle	10; 11
Oct 29-Nov 2	Cell cycle; Genes and Chromosomes	11; 12
Nov 5-9	Exam #3 (Nov. 6) Genes and Chromosomes; DNA	12; 13
Nov 12-16	DNA; Gene expression	13; 14
Nov 19-23	DNA to Protein-Gene expression (No classes Nov. 21-23)	14
Nov 26-30	Gene mutation; Exam #4 (Nov. 29)	15
Dec 3-7	Final Exam (Fri., Dec. 7; 2:45-4:45 PM)	1-15

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.