

BIOL 1030. Introduction to Biology: Organismal Biology. 3 Hours.

Instructor: Dr. Robert Gannon
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Office hours: MWF 11:00 -12:00; TR 9:00 - 9:30,
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Course Description

An introduction to modern biology for the non-major with special emphasis on the processes involved in the development and maintenance of complex multicellular organisms.

Course Objectives

Upon completion of this course the student should be able to: 1) Exhibit a broad perspective on the principles unifying various biological disciplines from evolution to molecular biology (DBEO 2 & 5); 2) Understand basic biological chemistry from elements to organic compounds to macromolecules; 3) Comprehend basic principles of biology at the cellular level to include structure, function, metabolism, communication, reproduction, molecular biology, and gene expression (DBEO 3 & 4); 4) Perform, analyze, interpret, and report laboratory experiments (DBEO 1); 5) Develop and test a hypothesis using experimental microscopy and quantitative skills acquired in the laboratory (DBEO 1 & 5). These objectives support the Department of Biology Educational Outcomes # 1-5 listed above (DBEO 1-5) and the University General Educational Outcomes # 5 as listed in the VSU Undergraduate Catalogue

Text

Marielle Hoefnagels -Biology: Concepts & Investigations 5th Ed. (2018) Connect package, McGraw Hill . ISBN-13: 9780078024207

This course is participating in the Day 1 Textbook Savings Program. You will receive instant access to your course material and save 30% or more off the retail price. If you choose not to participate in this program, you must opt-out no later than the drop/add deadline. To opt-out or to learn more about the program, please visit <https://www.valdosta.edu/administration/finance-admin/auxiliaryservices/bookstore-program/opt-out-instructions-.php> • Day 1 program – Click on the “registration” link on the class Blazeview page. • Then click on “access now” - Begin your 14-day Temporary Access period. All students begin as temporary status on the program. The status will change unless you “opt out”. Your student account will be billed so you do not “purchase” anything at this site. Please note: After you register, you will have the option to purchase a low-cost, binder-ready, loose-leaf, print-version of the text through Connect if you desire a hardcopy text. This is optional. If you choose to purchase a copy, a full-color, loose-leaf version will be shipped to you.

Assessments

There are no class assignments, just quizzes and exams to determine your grade.

All quizzes and exams are given online via BlazeView and are open-book with limited time.

Quizzes will be given each week during a broad time window on one day. Exams must be taken on Fridays during the normal class time of 12:00 – 12:50.

There are five exams, each worth 100 points and the best four scores will be counted for the overall exam grade.

Fourteen quizzes are scheduled, each quiz is worth ten points, and the best ten scores are counted for the overall quiz grade.

There are no make-up exams or quizzes.

No excuses are given for being sick as everything is online and your presence in class is not required to take a quiz or exam.

Four exams @ 100 points each 400 points

Ten quizzes @ 10 points each 100 points

Course Total 500 points

450 – 500 points = A

400 – 449 points = B

350 – 399 points = C

300 – 349 points = D

299 or less points = F

Attendance

Attendance is not required except for the first five lectures when proof rolls are completed (if you do not fill out the attendance sheet in class you will be dropped from the course).

All PowerPoint lectures are provided for you on BlazeView. The quiz and exam questions are taken from these lecture topics, so study them and use the textbook to supplement your notes. No study guides or class notes will be provided.

Required Core IMPACTS Course Statement

This is a Core IMPACTS course that is part of the STEM 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 will 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

Required 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.

Required 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/>

Tentative Schedule

Date		Chapter
8/19	<i>Introduction - Life</i>	1
8/21	" "	1
8/23	" "	Quiz 1
8/26	<i>Biological Chemistry</i>	2
8/28	" "	2
8/30	" "	Quiz 2
9/4	<i>Cells</i>	3
9/6	" "	3
9/9	" "	Quiz 3
9/11	<i>Energy</i>	4
9/13	Exam 1 Chapters 1-3	
9/16	<i>Energy</i>	4
9/18	" "	Quiz 4
9/20	<i>Photosynthesis</i>	5
9/23	" "	5
9/25	" "	Quiz 5
9/27	<i>Fermentation & Respiration</i>	6
9/30	" "	6
10/2	" "	Quiz 6
10/4	Exam 2 Chapters 4-6	
10/7	<i>DNA structure & Function</i>	7
10/9	" "	7
10/11	" "	Quiz 7
10/16	<i>DNA Replication</i>	8
10/18	" "	8
10/21	" "	Quiz 8
10/23	<i>Reproduction</i>	9
10/25	" "	9
10/28	" "	Quiz 9
10/30	<i>Inheritance</i>	10
11/1	Exam 3 Chapters 7-9	
11/4	<i>Inheritance</i>	10
11/6	" "	Quiz 10
11/8	<i>DNA Technology</i>	11
11/11	" "	11
11/13	" "	Quiz 11
11/15	<i>Evolutionary Forces</i>	12
11/18	" "	12

11/20	" "	Quiz 12	12
11/22		Exam 4 Chapters 10-12	
11/25	Evidence for Evolution		13
12/2	" "		13
12/4	" "	Quiz 13	13
12/6	Speciation & Extinction		14
12/9	" "	Quiz 14	14
Finals		Exam 5 Chapters 13-14	