BIOL 1030: Organismal Biology
Summer II Semester 2023, 3 Credit hours (weekly: 3 hr lecture)
Department of Biology, College of Science & Math, Valdosta State University

Lecture (BC 1023): (CRN# 26739) M W F 9:00 a.m. – 9:50 p.m.

Instructor: Dr. Brian C. Ring

Office: BC 2084

Office hours: **M & W** 10:00 a.m. – 1:00 p.m. (after lecture or by appointment)

Phone: 229-249-4841 (Dept. office 333-5759)

email: bcring@valdosta.edu (please use D2L BlazeView first)
Pre-Requisites: None. Note this course is an elective for non-science majors.

Co-Requisites: BIOL 1040 Laboratory.

**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.

#### **Required Materials:**

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

I strongly recommend you read the appropriate chapters as we move along in the class.

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 <a href="https://www.valdosta.edu/administration/finance-admin/auxiliary-services/bookstore-program/opt-out-instructions-.php">https://www.valdosta.edu/administration/finance-admin/auxiliary-services/bookstore-program/opt-out-instructions-.php</a>

- 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.

**Online Achieve:** Assignments require a subscription to MacMillan Achieve. More information available on course BlazeView (BV) site. Access should be available through the Day 1 program or you can directly register.

<u>Graded Course Components</u>: Your final grade will be based primarily on your performance on online MacMillan Achieve assignments, lecture assignments, and exams. Additional summative exercises will be executed during lecture requiring individual and group effort to prepare you (the student) for lecture exams (formative assessment).

Exams: (60%) There will be 5 lecture exams covering sequential material as outlined below. Students are required to read assigned text to prepare for lecture quizzes before coming to class. Lecture and in class assignments are designed to prepare you for exams. Exams will be primarily composed of multiple choice, multi-select, true/false, etc. Each of the exams are scaled to 100 points and averaged AND most likely will be taken online in BlazeView course site. Lecture Exam 5 will be taken during the allotted Final Exam time specified for Spring 2024 (see below). There are NO MAKEUP EXAMS. At the instructor's discretion, the lowest exam grade may be dropped.

Online Connect Assignments: (25%) Weekly assignments covering the textbook material will be assigned in BV. Quizzes covering the readings and other tutorials are assigned here to help you prepare for exams.

**Lecture Assignments:** (15%) In class quizzes or group assignments will be given during lecture time and will also serve as study guide material for exams. So your attendance in lecture is imperative to your success.

**Grade Assessment:** Calculate your overall grade as follows:

(Online & Lecture Assignments X .40) + (Lecture exam average X .60) = Overall percentage grade. Overall letter grades will be assigned on a 10 point scale: 90-100% = A, 80-89% = B, 70-79% = C, 60-79% = D and, 59% and below = F.

**Notes on grading philosophy:** Students should note that a grade of "A" in this course represents an exemplary command of the material. To obtain this grade of excellence, it is recommended that students study daily and clarify with the professor any problems regarding course information, as they arise. Additionally, the instructor may implement a curve based on the overall class performance at the end of the course.

Mid-term, or in-progress grades: The instructor is required to submit in-progress grades prior to mid-term (2/29/20224). In theory, a mid-term grade is necessary for a student to assess how s/he is doing in class by midterm. In this course, students will have feedback on at least one major exam by midterm, several lab quizzes, lab assignments, and any homework or writing assignments. I will, in general, assign an overall average grade at this point on the normal scale of A-F viewable on Banner. Students receiving a grade of "D" or lower should therefore carefully evaluate their option of dropping this course by midterm without academic penalty.

**Attendance:** Attendance in this course is required for success and is essentially worth 15% of your overall grade. Students should be seated at the beginning of class. If you are late, your attendance may not be acknowledged. Attendance may be taken at any time during the lecture and/or by assignments.

#### **EXAM SCHEDULE:**

Exam 1: Monday, January 29, 2024
Exam 2: Monday, February 26, 2024
Exam 3: Monday, March 18, 2024
Exam 4: Monday, April 8, 2024
Exam 5: Friday, April 26, 2024

**NOTE:** You will have the class or online time only to complete each lecture exams.

<u>Privacy Act (FERPA)</u>: The Family Educational Rights and Privacy Act (FERPA) prohibit the public posting of grades by social security number or in any manner personally identifiable to the individual student. No grades can be given by email or over the telephone, as positive identification can not be made by this manner. Grades will be posted through BlazeView course website.

**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 <a href="https://www.valdosta.edu/asc/">https://www.valdosta.edu/asc/</a>

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.

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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.

## **TENTATIVE LECTURE OUTLINE:**

### **Module 1:** January 8 – January 29

Chapter 1: Introduction/Studying life

Chapter 2: Chemistry of life

Chapter 3: Cells

Exam 1: Monday January 29

## **Module 2:** January 30 – February 26

Chapter 4: Energy of life

Chapter 5: Photosynthesis

Chapter 6: Respiration & Fermentation

Exam 2: Monday February 26

# **Module 3:** February 27 – March 18

Chapter 7: DNA structure/function

Chapter 8: DNA replication

Chapter 9: Sexual reproduction

Exam 3: Monday March 18

# **Module 4:** March 19 – April 8

Chapter 10: Inheritance

Chapter 11: DNA technology Chapter 12: Forces of evolution

Exam 4: Monday April 8

# **Module 5:** April 9 – April 26

Chapter 13: Evidence of evolution

Chapter 14: Speciation and extinction

Chapter 15: Origin and history of life

Exam 5: Friday April 26

**NOTES:** To be most successful with the above lecture schedule, you must read the text prior to lecture and complete the Connect Assignments. Other in class assignments will be provided to help you learn the material at the required level of cognition so you will be well prepared!

**Important Spring 2024 dates** 

January 8 First class day January 11 Registration ends

January 15 Dr. Martin Luther King, Jr Holiday (University Closed)

February 29 Official Midterm for spring 2024

March 7 Withdrawal Deadline for full-term VSU courses
March 11-15 Spring Break (university open/no classes meet)

April 29 Last class day for spring 2024

Apr 30-May 3 Final Exams

May 6 Students View Final Grades in Banner after 5pm