BIOL 1200: History of the Life Sciences Department of Biology, College of Math and Science Valdosta State University Spring 2023, Syllabus and Course Policies

Lecture: Bailey Science Center, Room 2022 - T/TH 11:00 AM-12:15 PM

Section A: CRN# 22499 (3 credit hours)

<u>Instructor:</u> Eric Chambers (Dr. Chambers) <u>Office:</u> BSC 2214 <u>Phone:</u> 229-249-2736

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

Course description: An introduction to the history and philosophy of biology and related sciences. The development and evolution of major theories and techniques, and interactions between science and culture will be emphasized.

Scope & Objectives: By the end of the course students are expected to be able to describe the development of the life sciences as a form of inquiry including major paradigm shifts and their consequences. Students will also explain how technological developments have affected human understanding of the living world and recognize the impact advances in biological knowledge have had on society and human culture. This corresponds to Educational Outcome 1 (Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.) for the Department of Biology as listed in the current VSU catalogue.

Prerequisite: None

Text: The Story of Life: Great Discoveries in Biology; Sean B. Carroll. W. W. Norton & Co. ISBN-13: 978-0393631562.

Alignment of Course Objectives with VSU General Education Outcomes: The course objectives and expectations described above align with VSU General Education Outcomes 2, 3, and 4. (2.) Students will demonstrate cross-cultural perspectives and knowledge of other societies. They will possess sufficient knowledge of various aspects of another culture, including the language, social and religious customs, aesthetic expression, geography, and intellectual and political history, to enable them to interact with individuals within that society from an informed perspective. They will possess an international viewpoint that will allow them to examine critically the culture of their own nation and to participate in global society. (3.) Students will use computers and information technology when appropriate. They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools. (4.) Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication. Student proficiency in meeting these outcomes will be assessed by exams, writing assignments and oral presentations as described below.

Course requirements & grading policy: Students are expected to attend all scheduled lectures and participate in discussions in class. Attendance at lectures may not be recorded daily after the Drop/Add period but students are expected to attend all lectures and up to 10 extra credit points may be awarded for attendance. Regardless of attendance, each student is responsible for all material presented in class and must attend when tests are given and when assigned work is due. The instructor is not obligated to provide lecture notes or other material to absentee students or to offer make-up examinations. Students with valid, documented excuses (eg. a death in the immediate family) may receive special consideration but must contact the instructor immediately and provide documentation if asked.

Assessment will consist of:
Exams (4 exams, 100 points each)
Short reading/writing assignments, quizzes or homework (150 points)
Final Examination (100 points)
Total: 650 points

Grade Scale: A 90-100%

B 80-89% C 70-79% D 60-69% F <60%

Exams will include some combination of multiple choice, fill in the blank or matching questions. Short writing assignments will require discussion of literature associated with topics covered in class. In addition, students may be required to research assigned topics, discuss them in class or prepare a PowerPoint presentation to be given to the entire class. The comprehensive final exam will be given Wednesday, May 1, 2024 at 10:15 in BSC 2022.

Academic Integrity: Academic Honesty Policy: Cheating, plagiarism (submitting another person's material as one's own, or doing work for another person which will receive academic credit) are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an assignment or exam, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were your own work. In this particular course, removing or altering collection information associated with specimens is considered a violation of the Academic Honesty Policy and will be treated in the same manner as any other violation. Students are responsible for knowing, understanding and complying with the VSU Student Code of Conduct, in Appendix A of the Student Handbook (http://www.valdosta.edu/stulife/handbook/) If substantial evidence exists for a violation of this policy, the student(s) involved will receive a grade of 'F' for the course and an official record will be filed following the Academic Integrity Response along with a letter to the Dean of Students. See also: http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml

Special needs: Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. 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.

Administration of online Student Opinion of Instruction (SOI): 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 on BANNER. 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. Instructors will be able to view only a summary of all responses after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the data until after final grade submission, they will be able to see which students have or have not completed their SOIs. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey and a timetable for this term is available at SOI Procedures and Timelines (located at https://www.valdosta.edu/academics/academic-affairs/sois/ under "Information for Students - Directions for Accessing and Completing SOIs").

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 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: The Director of the Office of Social Equity, titleix@valdosta.edu, 1208 N. Patterson St., N. Patterson St., Valdosta State University, Valdosta, Georgia 31698, 229-333-5463.

Attendance and Participation: Regular attendance and participation are essential for success in class. Therefore, students are expected to attend class as scheduled and must complete assignments as outlined in the syllabus. If students are absent, they should follow the course's attendance policy. If students must be absent due to a quarantine or isolation requirement for COVID-19, they must report this situation via the COVID Self Reporting Link in MyVSU and through the Dean of Students Office to report any other absences as well. Instructors will not alter the schedule for individual students unless arrangements have been made in advance.

Tentative Schedule – Spring Semester 2024

Week	Week	Topics	Assigned Reading
1	Jan 8-12	Part I: The Process of Science Biology and Ancient Civilizations	ТВА
2	Jan 15-19	Biology and Greeks/Renaissance	TBA The Story of Life: Ch. 1 The Story of Life Ch. 2
3	Jan 2226	Microscopes and other early scientific instruments	ТВА
4	Jan 29—Feb 2	Exam #1; Part II: Heredity and genetics	The Story of Life: Ch. 3
5	Feb 5-9	Molecular Basis of Life	The Story of Life: Ch. 4 and Ch. 5
6	Feb 12-16	Gene Medicine	The Story of Life: Ch. 6
7	Feb 19-23	Breakthroughs in Molecular Biology	ТВА
8	Feb 26-Mar 1	Exam #2; Part III: The Evolution and Origins of Biological Diversity	The Story of Life: Ch. 7
9	Mar 4-8	Evolution and Endosymbiosis	The story of Life: Ch. 8 and Ch. 9
10	Mar 11-15	Spring Break	
11	Mar 18-22	Human Evolution	The Story of Life: Ch. 11 and Ch. 12
12	Mar 25-29	Exam #3; Part IV: Ecology	The Story of Life: Ch. 14 and Ch. 15
13	Apr 1-5	Ecology and Climate Change	The Story of Life: Ch. 16
14	Apr 8-12	Part V: Physiology and Medicine	The Story of Life: Ch.17
15	Apr 15-19	Immunity and Neuroscience	The Story of Life: Ch.18 The Story of Life: Ch. 19
16	Apr 22-26	Review and exam #4	
Exam week	May 1	Final exam; Wednesday May 1, 2024; 10:15 am-12:15 pm	#2 May 26: From #4 April 25

Tentative Exam Dates: Exam #1 Jan. 30; Exam #2 Feb. 27; Exam #3 Mar. 26; Exam #4 April 25.