

**BIOL 1200 HISTORY OF THE LIFE SCIENCES Spring 2014
SYLLABUS & COURSE POLICIES**

Lecture: MW 2:00-3:15 (BSC 2022)

Instructor: Dr. Mark Blackmore

Office: Bailey Science Center 2022

Office Hours: M, W, Th, F 12:30-1:30 or by appointment

Research Lab: BSC 2202

Contact information

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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 in both Western and non-Western civilizations 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 2013-2014 VSU catalogue. **3 credit hours. Prerequisite: None.**

Text: *A History of the Life Sciences, Third Edition, Revised and Expanded* by Lois N. Magner 2002.

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 computer 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 should be prepared to answer when called upon in class and may be marked down if they are not ready or are not present when called on. 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:

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|---|------------------------|
| Exams (3 exams, 100 points each) | Grade Scale: A 90-100% |
| Short writing assignments, quizzes or homework (50 points) | B 80-89% |
| Participation in class discussions and oral presentations (50 points) | C 70-79% |
| Final Examination (100 points) | D 60-69% |
| Total: 500 points | F < 60% |

Exams will include some combination of short answer, fill in the blank, matching, or multiple choice 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 7 at 12:30 in BSC 2022.**

Tentative Schedule – Spring Semester 2014

| <u>Week</u> | <u>Dates</u> | <u>Topics</u> | <u>Assigned Reading (Magner):</u> |
|-------------|---------------|--|-----------------------------------|
| 1 | Jan 13-15 | Origins and definitions; Biology & Ancient Civilizations | <i>Chapters</i> 1 |
| 2 | Jan 22 | Greek Natural Philosophers and Scientists & The Greek Legacy | 2 |
| 3 | Jan 27-29 | The Greek Legacy | 2 |
| 4 | Feb 3-5 | The Renaissance and the Scientific Revolution | 3 |
| 5 | Feb 10*-12 | The Foundation of a Modern Scientific Tradition | 4 |
| 6 | Feb 17-19 | Science and Change: Scientific Societies | TBA |
| 7 | Feb 24-26 | Microscopes and the Small New World | 4 |
| 8 | Mar 3-5 | Problems in Generation: Organisms, Embryos and Cells | 5 |
| 9 | Mar 10**-12 | Physiology | 6 |
| 10 | Mar 17-19 | Spring Break | |
| 11 | Mar 24-26 | Microbiology, Virology, and Immunology | 7 |
| 12 | Mar 31-Apr 2 | Evolution | 8 |
| 13 | Ap 7-9*** | Darwinism and Society | TBA |
| 14 | Ap 14-16 | Genetics | 9 |
| 15 | Ap 21-23 | Genetics & Molecular Biology | 10 |
| 16 | Ap 28-30 | Environmentalism | TBA |
| 17 | May 5 & May 7 | Last Class Meeting & Final Exam Given (Wednesday, May 7 12:30-2:30) | |

*Lecture Test Dates: *Exam 1- February 10; **Exam 2- March 10; ***Exam 3- April 9*

Academic Integrity & Conduct: Student conduct should follow guidelines specified in the VSU Student Handbook and on the Biology Department homepage. **Each student is required to read the “VSU Biology Department Policy on Plagiarism” on the Department homepage and turn in a signed acknowledgment statement the first week of classes.** It is expected that students will maintain the highest ethical standards, honesty and courtesy at all times. Students are hereby informed that University-owned software programs may be used in this class to detect plagiarism. Evidence of dishonesty in the completion of assignments or during tests will result in the forfeiture of the points allocated for that task. Any student caught cheating may be reported to the University administration. A second offense will be grounds for dismissal with a failing grade. To avoid disruptions, all cellular telephones and pagers should be turned off for the duration of class. Students failing to abide by this policy may face disciplinary action.

Special needs: Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in the Southwest Wing of Farber Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY). Please discuss any such needs with me at the beginning of the semester. 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.