CAMPBELLSVILLE UNIVERSITY

COURSE SYLLABUS

PLEASE TYPE. DATE September 12, 2016

ACADEMIC UNIT Natural Science FACULTY Glenn McQuaide

☐ Please check to indicate this course has a service learning component.

Discipline	Course# Section	Title of Course	Credit Hours	Cross Reference (if applicable)
BIO	200-01	Biological Concepts	4	

TEXTBOOK ☑ Required ☐ Not Required

Author Mader, Sylvia Title Biology, 11th Ed

Publisher McGraw-Hill Date of Publication 2013

WORKBOOK

Author _____ Title _____

Publisher _____ Date of Publication _____

PLEASE ANSWER THE FOLLOWING QUESTIONS ON A SEPARATE SHEET OF PAPER AND ATTACH TO THIS FORM.

1. DESCRIPTION OF COURSE: Develop a brief description of the course as it will appear in the Catalog.

2. STUDENT LEARNING OBJECTIVES: List the student learning objectives for the course. Please relate these objectives to the mission and goals of the University and the Academic Unit. For general education courses, please indicate which student learning objectives address general education goals and the intended method of assessment. A minimum of four of the seven general education goals must be included.

   Example: Students will demonstrate their ability to compare and contrast two types of basket weaving. (Goal: Oral and Written Communication; Evidence: research paper and class presentation)

3. COURSE OUTLINE: Outline the topics/units that are to be taught.

4. EVALUATION: How do you plan to determine the grade in the course? Please include grading scale.

5. REQUIREMENTS:
   a. Examinations: State when tests are to be administered, including unit, mid-term, and final examinations.
   b. Reports: How many, length required, and what type (Oral, term and/or research, book critiques).
   c. Supplemental reading assignments or outside work required.
   d. Supplemental instruction aids: Audio visual aids, field trips, guest speakers, etc.

6. BOOKLIST

DEAN Date Copy Received _____

VICE PRESIDENT FOR ACADEMIC AFFAIRS Date Copy Received _____

Campbellsville University

Biological Concepts, Biology 200-01, 4.0 semester hours

MWF 9:00 a.m., SSC 111 & Lab
-91, -92, -93, or -94 M, T, or W 2:00-4:30 or T 9:30-12, SSC 101

Professor:
Dr. Glenn McQuaide, SSC 208, 270-789-5044; 384-5912; 849-5530 (text)
ggmcquaide@campbellsville.edu or g_mcquaide@yahoo.com

Textbook: Biology, 11th ed.
by Sylvia Mader
McGraw Hill, publishers, 2013

Laboratory Manual: Laboratory Manual: Biology, 11th ed.
by Sylvia Mader
McGraw Hill, publishers, 2013

1. Description of Course:

A foundation course for biology majors or minors. The class will introduce the student to basic biological concepts including biochemistry, metabolism, respiration, photosynthesis, mitosis, meiosis, genetics, ecology, and evolution. Includes one 150-minute laboratory per week.

2. Course Objectives:

This course will provide the student with a foundation of knowledge in the Biological Sciences. This foundation will prepare the student to successfully complete a science major that may open many career doors. An understanding of the natural and physical sciences is critical in making responsible decisions in many facets of our lives. This course will provide a basis for thinking about these areas. It will focus on molecular properties, biomolecules, cell structure and function, genetics, and population dynamics. By the end of this course, the student will demonstrate by examination, written evaluation, or oral presentation: examples and principles of behavior, ecology, and natural selection, an understanding of the terminology required to communicate issues of modern-day biology, & a description and understanding of science along with how it may inform and influence decisions that relate to our environment.

3. Course Outline:

Broad topics to be covered in this course are:

What is Science?
Overview of Tools and Technologies used in Science
Intro. To Carbohydrates, Lipids and Oils, Proteins, and Nucleic Acids
Plasma Membrane Structure and Function
Enzyme Function (Rates and Affecting Factors)
Cell Structure and Organelle Function
Metabolism and Aerobic Respiration
Reaction of Photosynthesis
Cell Cycles (Mitosis and Meiosis)
Chromosome Structure and Function
DNA and Biotechnology
Mendelian Genetics
Microevolution
Macroevolution and Mass Extinctions
Survey of Life
Overview of Behavior and Ecology

4. Evaluation:

There will be three hour exams (100 points) and one comprehensive final (125 points) in addition to two lab exams (75 points each) given in this course. A journal/notebook will be required in laboratory and will be worth 75 points. Throughout the course, 150 points worth of periodic chapter assignments (such as quizzes or in-class writings), homework, &/or oral quizzes will be given. The final grade will be based on a percentage of the points earned on the exams and other assignments.

90-100% = A, 80-90% = B

70-80% = C, 60-70% = D, below 60% = F

5. Requirements:

The University Attendance Policy will be followed in this class. Regular and punctual attendance is expected of each student. There are no "excused" absences. Class roll will be taken each meeting. At my discretion, tardy attendance will be recorded as 1/2 absence. Students absent for more than two weeks worth of lectures and/or labs will be assessed a penalty of 3 points (subtracted from the final grade average) for each additional absence.

Students are to bring their textbooks to lecture. They are to have read the assigned topic(s) and be prepared to participate in discussions. It is the student's responsibility to borrow notes and to make up all missed work. Additionally, the student is responsible for the relevant material presented in the textbook, all handouts, and all videos. Under normal circumstances, recording devices are not permitted in class. No caps, hats, or headgear are to be worn in class or lab.

Tentative exam dates are listed below. The final examination will be given Wednesday, December 10, 8:00 a.m., in accordance to the schedule available in the Academic Dean's office.

I adhere to the Natural Science Academic Integrity Policy. A copy will be provided within the first two weeks of classes. Cheating will not be tolerated. Punishment will be severe and could result in dismissal from the University. See the University Catalog and Handbook for details. At my discretion, a statement of academic honesty may be required of students on any given class assignment.

There is no excuse for missing a scheduled exam without contacting me ahead of time. With prior notification, arrangements can usually be made to take the scheduled exam. There will be NO MAKEUP EXAMS. If you miss a scheduled exam, for a valid reason, the value of the comprehensive final is increased proportionately. For example, if a student misses one exam, the final will be 225 points.

Campbellsville University is committed to reasonable accommodations for students who have documented physical and learning disabilities, as well as medical and emotional conditions. If you have a documented disability or condition of this nature, you may be eligible for disability services. Documentation must be from a licensed professional and current in terms of assessment. Please contact the Coordinator of Disability Services at 270-789-5192 to inquire about services.

Security 789-5556 or 270-403-3611

Campbellsville University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the University requires all responsible employees, which includes faculty members, to report incidents of sexual misconduct shared by students to the University's Title IX Coordinator.

Title IX Coordinator: Terry VanMeter
1 University Drive, UPO Box 944
Administration Office 8A Phone – 270-789-5016
Email-twvanmeter@campbellsville.edu

Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: www.campbellsville.edu/titleIX

Tentative Exam Schedule

Exam I- 9/18 Exam II- 10/14 Exam III- 11/13 Final 12/7, 11:00 a.m.

6. Reference Book List

Allen, R. D. 1995. Biology: A Critical Thinking Approach. WCB/McGraw-Hill, Boston, MA.

Foundation for Critical Thinking. 2001. How to Study and Learn a discipline using critical thinking concepts & tools. Dillon Beach, CA: The Foundation for Critical Thinking.

National Academy of Sciences. 1998. Teaching about Evolution and the Nature of Science. Washington, DC: National Academy Press.

Stern, Kingsley. 2007. Introductory Plant Biology, 10th ed., McGraw Hill, publishers. Boston, MA.