GENERAL COURSE INFORMATION

BIOL 1408 GENERAL BIOLOGY I (NON-MAJORS)
FALL 2020

*\* This is a long syllabus. That is because it contains SPC policies and statements that have to be included.*

***\*\* It should be clear by now that with the Covid-19 pandemic that the instructor may have to add, change, or delete portions of this syllabus as needed. You will be informed if this happens.***

***\*\*\* Due to the Covid-19 pandemic, Google Classroom will be used in all Biology classes. We will start the year with this powerful classroom tool but more details will be given to the students as they become available.***

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Office Hours: Tues-Fri during intervention or by appointment.

**Course Description:**

The general biology course is devoted to principles shared by all organisms. These principles are cell biology, energy, genetics, evolution, and ecology. This course is suitable as a required lab science for non- biology majors.

**Course Implementation:**

PREREQUISITE: None

CREDIT: Four Semester Hours

# TEXT: Campbell Essential Biology with Physiology, 6th Edition

Eric J. Simon, New England College

Jean L. Dickey, Clemson University

Jane B. Reece, Berkeley, California

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LAB MANUAL: Labs will be provided throughout the semester by the professor.

**Course Objectives:**

Lab exercises will be handed out in lab, so you will not need to purchase anything for lab.

1. To introduce basic biological principles through an integrated approach.
2. To investigate the cellular processes of living organisms with an emphasis on biological chemistry applications.
3. To investigate the unifying themes and key concepts of the different types of organisms.
4. To acquaint the student with the anatomy, function, genetics and evolution of different types of organisms.
5. To instill an appreciation of the variety and diversity of major organism groups.
6. To allow laboratory investigation of topics covered.

**Class format:**
The format of this class will consist of lectures, discussions, and field study experiences.

To be prepared for class you will be responsible for reading chapters in the book (or corresponding PowerPoints) and taking quizzes over that topic. In class, we will discuss specific objectives, collaborative learning, assignments, have in class quizzes, and labs.

**Policies, Procedures and Rules:**

This course will be conducted according to the policies and procedures of the South Plains College Student Handbook and General Catalog.

**Attendance Policy:** Attendance is mandatory. Punctual and regular class and lab attendance is required of all students. Students are responsible for all class work covered during absences from class, even in cases in which they are able to satisfy the instructor that the absence was unavoidable. When unavoidable situations such as illness, weather, an official college trip, or a death in the family causes absences, I may permit the student to make up class work missed. In such cases it is the student's responsibility to complete the work missed within one week of their return to class.

**Absence Policy:** When absences become excessive, minimum course objectives cannot be met and the student will be withdrawn from the course.

**Tardy Policy:** Excessive tardiness will not be tolerated. A student, who is consistently tardy, disturbs class, is disrespectful and rude will be withdrawn (dropped) from the class.

**Grades:** There will be quizzes, exams, homework, and lab-based grades. Late work will not be accepted.

**Exams:** The exams will be announced in advance and will be primarily classroom material with lab material. If it is known in advance that an absence will occur on an exam date, and the instructor is notified ahead of time, it may be possible, under special circumstances, to take the exam at an alternate time. Otherwise the missed exam will count as a zero when computing the semester average, due to the complexity and time involved in setting up lab exams with microscopes and specimens involved, this policy is rigidly adhered to. Do not miss exams!!!

**Quizzes:**Reading Quizzes: There will be assigned reading quizzes over selected chapter(s).

**Homework:** Homework activities will be assigned (genetics problems, or group assignments, reading, laboratory reports.

**Discussions:** Student led discussions will occur at various points throughout the semester. Individual or group research will be required for certain topics. Quizzes will be held over materials discussed.

**Class Activities:** Various demo labs will be held as well as laboratory procedures will reinforce readings and material currently being covered. Points earned in these activities will accumulate with other Participation categories.

**Summary of Grades:**

|  |  |
| --- | --- |
| Exams  | 60%  |
| Quizzes /Homework | 20%  |
| Laboratory  | 20%  |
| Total  | 100%  |

|  |  |
| --- | --- |
| Letter Grade  | Course Average  |
| A  | 90> |
| B  | 80-89  |
| C  | 70-79  |
| D  | 60-69  |
| F  | <59  |

The last day to drop this course is: to be announced

**Study Aids:** Peer Tutors may be available for one-on-one tutoring sessions that are free of charge. Contact the instructor or the Counseling Center for more information.

**ADA Statement:** Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office through the Guidance and Counseling Centers at Reese Center (Building 8) 716-4606, or Levelland (Student Services Building) 716-2577.

**Academic Integrity:** It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his own any work, which he has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

Dishonesty (cheating) of any kind on examinations and quizzes on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination or quiz, obtaining information during an exam from the textbook or from the exam paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in an office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of course work as his own.

**Dismissal Policy:** A high standard of conduct is expected of all students. It is assumed that obedience to the law, respect for properly constituted authority, personal honor, integrity, and common sense will guide the actions of each member of this class. Any student who fails to perform to expected standards will be asked to withdraw from the class.

Electronic devices (cell phones, text messaging devices, music devices, etc): ALL electronic devices need to be in the off and/or silent mode -- no vibrating either. All electronic devices will be put away during class including exams. If the electronic device “rings” or “buzzes,” is being used during class for text messaging or a student gets up from class to answer a phone call, 10 points will be deducted from the students next major exam grade per incident.—*This is SPC policy. We will simply adhere to RHS policy—no cell phones unless instructor approves (and approval will be rare or nonexistent)*

**Privacy:** The federal law guaranteeing student privacy is the policy of this professor as well as that of SPC. This means that I will not discuss your grade with anyone other than you (which means that I will NOT discuss your grade with your parents, guardians, friends, etc.)

**Diversity Statement:** In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

**Lab Safety:** Each student will be informed/trained on the “Chemical Hygiene Plan (CHP) for Laboratories at South Plains College” documentation and training during the first week of the semester. Each student will be required to acknowledge receipt of this information and be required to follow all procedures outlined by the instructor and/or staff of South Plains College.

**Material Safety Data Sheets (MSDS):** These data sheets detail any potential hazards which may be incurred while utilizing various chemicals in the laboratory. The MSDS notebook is located in room 146 of the science building. All students are encouraged to read about the chemicals used in the lab in the MSDS notebook. Please ask the instructor if you need assistance.

**Campus Concealed Carry -** Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: http://www.southplainscollege.edu/human\_resources/policy\_procedure/hhc.php Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

**Core Objectives:** We will cover: Communication Skills, Critical Thinking, Empirical and Quantitative Skills, and Teamwork.

Biology 1408 - Fall 2020
Biology I for Non-majors Section/Major Exam Topics and Reading Assignments:

Note the word “Tentative,” below. That means it could change. Last year, for example, it *did* change because I, and later my wife, took seriously ill with what *may* have been some of the first cases of Covid-19

**Tentative Dates for Chapters/Reading Assignments/Exams/Labs**

|  |  |  |  |
| --- | --- | --- | --- |
| Dates  | **Week** | **Topics** | **Unit** |
| Aug 20-21 | 1-1 | Course policies and safety info. | Cells |
| Aug 24-28 | 1-2 | 1 Learning About Life |  |
| Aug 31-Sept 4 | 1-3 | 2 Essential Chemistry for Biology.  |  |
| Sept 8-11 | 1-4 | 3 The Molecules of Life. **Exam Trs/Fri**  |  |
| Sept 14-18 | 1-5 | 4 A Tour of the Cell.  |  |
| Sept 21-25\* | 1-6 | 5 The Working Cell |  |
| Sept 28-Oct 2 | 2-1 | 6 Cellular Respiration: Obtaining Energy from Food |  |
| Oct 6-9 | 2-2 | 7 Photosynthesis: Using Light to Make Food 106. **Exam Trs/Fri**  |  |
| Oct 12-16 | 2-3 | 8 Cellular Reproduction: Cells from Cells | Genetics |
| Oct 19-23 | 2-4 | 9 Patterns of Inheritance **Exam Trs/Fri** |  |
| Oct 26-30\* | 2-5 | 10 The Structure and Function of DNA |  |
| Nov 2-6 | 3-1 | 11 How Genes Are Controlled  |  |
| Nov 9-13 | 3-2 | 12 DNA Technology **Exam Trs/Fri**  |  |
| Nov 16-20 |  | 13 How Populations Evolve | Evolution |
| Nov 23-27 | 3-3 | *Thanksgiving break* ☺ | and |
| Nov 30-Dec 4 | 3-4 | 14 How Biological Diversity Evolves | Diversity |
| Dec 7-11 | 3-5 | **Review & Finals Week** |  |
| Dec 14-18\* | 3-6 | **TBD. SPC is already over for semester** |  |

\* End of HS 6-week grading period

Laboratory topics generally coincide with lecture topics.