# Lake-Sumter State College Course Syllabus

#### Course Information:

Course Prefix/Number: BSC 1010C

Course Title: General Biology I with Lab

CRN: 10123, 10386

Credit Hours: 4

Semester: Fall 2018

Class Days, Location, Time: Daily, TVCHS

Course Description: This course combines fundamental biological principles and modern concepts of cellular biology by including the following topics: chemistry, including organic and biochemistry, cell structure, enzymes, cellular respiration, photosynthesis, mitosis, meiosis, protein synthesis, genetics, and taxonomy. Other topics may be added at the discretion of the instructor. The lab component provides support for the concepts taught in lecture.

#### Instructor Information:

Name: Robin Cochran Dirksen

E-Mail: CochranR@lssc.edu, robin.cochran-dirksen@tvcs.org

Office Location: Room 201

Phone: 352.259.3777 x1201

Office Hours: By Appointment 2:40-3:20

#### Vital Communication Information:

For e-mail, please note that all students are required to use Lakehawk Mail for official college e-mail communications. See the college webpage for <u>instructions on activating Lakehawk Mail</u> (http://www.lssc.edu/lakehawk/Pages/default.aspx).

Sending a private message using the MESSAGES tool in Canvas is always the most secure method of contacting your Instructor.

Please remember that any phone contact with your Instructor should be of a professional nature. Please always leave a clear, concise, but detailed message with your contact and class information. Always follow up a phone call with a written account via Canvas Message or e-mail.

### Prerequisites/Co-requisites:

Prerequisites: Successful completion of all developmental writing and reading courses indicated through placement testing.

Co-requisites: None

#### Textbook & Other Course Materials:

Campbell Biology, 11<sup>th</sup> Ed. - Volume I, Custom Ed for LSSC, ISBN: 1323689044

### Technology Requirements:

Canvas is a required component of this course.

Major writing assignments need to be created and saved in a Google Doc, except for original data files that require computation for analysis, in which case you will upload your data file and your lab document.

Please ask for help if you are unsure how to save a file in a these formats.

Please see the LSSC Lakehawk Page for information on how to obtain Microsoft Office 365 as an LSSC Student (http://www.lssc.edu/lakehawk/Pages/default.aspx).

Commitment to ethical conduct is expected of every participant in one of my courses. Behavior expectations for the online environment are outlined below and before beginning an online course, participants must agree to abide by these guidelines.

Participants may not engage in practices that threaten the integrity of the course. Participants may not access anyone else's account, nor may they share their account passwords with others. Participants may not write, use, send, download or display deliberately hostile and insulting (inflammatory), obscene, threatening, harassing or otherwise offensive messages, postings, pictures or other forms of communication. Participants may not discuss private issues about the course via the threaded discussions and in-course communication tools. If you have issues and/or concerns about the course content, amount of work, grades given, etc. contact the instructor directly and privately. Participants may not post negative comments such as the amount of time spent on assignments on threaded discussions. This invites others to join in and complain which is not a positive use of class discussions. Feedback is welcome and should be submitted to the instructor, either personally or via e-mail.

#### Netiquette

Participants will conduct himself/herself in a manner that facilitates learning in the online environment. Participants will use proper punctuation, spelling and grammar in emails, threaded discussion postings and assignments.

#### **Participant Expectations**

Participants may not copy other participants' work and submit as their own. Participants are responsible for his/her own learning. If you are unable to login, access lessons and/or complete assignments, or are not receiving emails, contact the instructor immediately. Participants will actively participate and complete all assigned work according to the course schedule. Participants may not engage in any of the following acts of academic misconduct: Cheating: The act or attempted act of deception in which a participant falsely represents that he or she has adequately learned information on an academic exercise. Collusion: Intentionally or knowingly helping or attempting to help another commit academic misconduct such as substituting for a test or completing an assignment for someone else. Collaborating with others when taking online tests including group test-taking where participants gather together in the same location, and printing and distributing copies of online tests or quizzes. Misrepresentation: Any action or omission with intent to deceive a teacher so as to affect a grade. Plagiarism: Knowingly representing the words, data or ideas of another as one's own in any academic exercise. Submitting all or part of another's work as one's own in an academic exercise including unauthorized collaboration with other participants. The assessments in this course are ways that

participants demonstrate knowledge, skills, and abilities related to the course goals and objectives. Higher level skills like synthesis, not just simple recall like copying and pasting information, is required in order to meet the rigor of the course outcomes and objectives.

Document sources as needed by including a citation in APA or similar style. Please remember that submitting work that is not your own is never acceptable. Online participants should be advised that in an effort to maintain system integrity and to ensure responsible use, files and communications in GoogleDocs are monitored and recorded. Under no circumstances should online participants expect that messages or discussion postings that are created, modified, transmitted, received or stored through Google Classroom or Skyward, may not be accessed by your teacher, or an administrator.

### Student Learning Outcomes:

The following outcomes will be assessed in this course. An "outcome" is defined as something students take with them beyond this course.

Describe and identify components, assess and discuss results, as well as design (and/or implement) scientific experiments.

Critically evaluate qualitative and quantitative data, applying inductive reasoning to arrive at scientifically rational conclusions.

Demonstrate competency with the principles of the scientific method, as well as an appreciation for its purpose in obtaining results from a collection of carefully recorded objectively based observations representing the current level of knowledge as accepted by the scientific community.

Integrate basic concepts of chemical, physical, and biological processes into a cohesive awareness of the interrelationships that exist between them.

### Course Objectives:

Objectives are defined as what the course will do and/or what the students will do as part of the course.

- Describe science as inquiry based on the scientific method of investigation and learning.
- Describe the differences seen between the various domains of life, how life began, and the implications of these on all life forms.
- Compare and contrast the unifying concepts and processes in life science from the simplest to the most advanced levels of organization and how these impact life on Earth.
- Identify how and why organisms reproduce at the cellular and organismal level.
- Discuss the molecular basis of heredity and the ethical responsibility associated with genetic studies

### Institutional Policies & Procedures:

### Academic Integrity:

The successful functioning of the academic community demands honesty, which is the basis of respect for both ideas and persons. In the academic community, there is an ongoing assumption of academic integrity at all levels. There is the expectation that work will be independently thoughtful and responsible as to its sources of information and inspiration. Honesty is an appropriate consideration in other ways as well, including but not limited to the responsible use of library resources, responsible

conduct in examinations, and the responsible use of the Internet. (See <u>college catalog</u> for complete statement. http://www.lssc.edu/students/Pages/Current/CourseCatalog.aspx)

#### Important Information for Students with Disabilities:

Any student with a documented disability who requires assistance or academic accommodations should contact the Office for Students with Disabilities immediately to discuss eligibility. The Office for Students with Disabilities (OSD) is located on the Leesburg Campus, but arrangements can be made to meet with a student on any campus. An appointment can be made by calling 352-365-3589 and specific information about the OSD and potential services can be found at www.lssc.edu, then go to "Quick Links" and click on <u>Disability Services</u>.

(http://www.lssc.edu/academics/disabilityservices/Pages/Default.aspx)

#### Privacy Policy (FERPA):

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part99) is a Federal law that protects the privacy of a student's education records. In order for your information to be released, a form must be signed and in your records located in the Admissions/Registrar's Office.

#### Zero-Tolerance for Violence Statement:

Lake-Sumter State College has a policy of zero tolerance for violence as stated in College Board Rule 2.17. Appropriate disciplinary action will be taken in accordance with Board Rule 2.17.

#### Attendance/Withdrawal Policies:

#### Institutional Information:

Once the Add/Drop period passes, students deciding to discontinue class attendance and/or online participation have the responsibility for formal withdrawal by the withdrawal deadline.

#### Withdrawal Deadline:

29, October, 2018

#### Instructor Policies:

See Classroom Etiquette and other sections of this document as it refers to late work and technology requirements.

### Late Work/Extensions:

Completing homework assignments in a timely manner is an important part of the learning process. Students are expected to complete and submit all assignments by the due date and time listed on the course calendar.

There is no make up for quizzes, exams, or tests, except under documented circumstances such as hospital stay, doctor excuse, police report, or military assignment. Students are expected to contact their instructor prior to class if they must be absent for any reason. Each situation will be determined on a case-by-case basis by your instructor. Instructors are not required to accept nor grade any quiz, test, or exam submitted late. Extensions are not possible. Quiz, exam, or test make up will be administered on campus by a proctor and are not eligible for "at home" completion. Be aware that if for some reason a student is allowed a make-up exam, it will not be the same version that was taken in-class on the scheduled day of the exam.

All graded/evaluated items must be completed by the due dates posted on the Course Calendar document associated with this course. All late work will receive a zero (0). Work schedules and "I forgot" are not valid excuses for late work. Do not wait until the last minute to complete assignments. It is the student's responsibility to have an alternate plan if their main computer system fails (i.e. – complete work on-site at a campus library or learning center, have a secondary computer available, etc.). Computer hardware, software and/or Internet problems are not acceptable excuses for incomplete assignments.

### Classroom Etiquette:

- Be on time to class.
- Bring your book to class each day and be prepared for the topic by pre-reading the material that is to be covered.
- Have access to a scientific calculator for homework, class, and lab (with exponents and logs)
- Show respect to the Instructor and other students during class and labs
- Pick up all papers and trash in class and Lab. Your Lab station must be clean and in order before you leave. This will have a negative impact on your lab grade.
- Turn all assignments in on time. There will be a 10% reduction in the earned grade for each class/lab period that an assignment is late.
- No leaving class during tests.
- Follow ALL lab rules and procedures.
- Success in Biology requires a large time commitment to homework and lab reports. A failure to complete assignments and skimp on lab reports will result in LOW grades and possibly failure.

### Grading Information:

Grading Scale: 90-100% A, 80-89% B, 70-79% C, 60-69% D, 59% and below F

#### Methods of Evaluation:

Assignments will be graded a variety of ways- electronically or by hand. Your work will be judged against accepted academic standards for writing and documentation.

### Assignment Overview & Grade Breakdown:

Category	Description	Points or %		
Class Grades	Includes work completed in-class and at home.	35%		
Lab Grades	des Laboratory			
Quizzes & Test	uizzes & Test Unit or lab tests			
Participation & Exit Ticket	a 10 points assessment will be given at the end of each class period; the student will automatically receive a 0 if they are not present that day of class	10%		
Final Exam	Final Exam Course final exam			

Category	Description	Points or %
	Total Points	100%

## Course Calendar:

Week	Begins	Ends	Objectives & Reading Assignments	Items Due
1	Thurs 8/9	Fri 8/17	Course Details, Chapter 1 Evolution, the Themes of Biology	
2	Mon 8/20	Fri 8/24	Ch 2 The Chemical Context of Life	LAB 1 Measurements and Lab Techniques
3	Mon 8/27	Fri 8/31	Ch 3 Water and Life	LAB 1a Properties of Water Lab
4	Tues 9/4	Fri 9/7	Ch 4 Carbon and the Molecular Diversity of Life	LAB 2 Functional Groups, Organic Molecules, Buffers and Dilutions
5	Mon 9/10	Fri 9/14	Ch 5 The Structure and Function of Large Biological Molecules	LAB 3 Qualitative Analysis of Biological Molecules
6	Mon 9/17	Fri 9/21	Ch 6 A Tour of the Cell	LAB 4 The Microscope
7	Mon 9/24	Fri 9/28	Ch 7 Membrane Structure and Function	LAB 5 Cell Structure and Membrane Function
8	Mon 10/2	Fri 10/5	Ch 8 An Introduction to Metabolism	LAB 3a pH and Mechanism of Action, LAB 6 Enzyme Activity
9	Mon 10/8	Fri 10/12	Ch 9 Cellular Respiration and Fermentation, Ch 10 Photosynthesis	LAB 7 Respiration
10	Tues 11/16	Fri 10/19	Ch 11 Cell Communication	LAB 8 Photosynthesis
11	Mon 10/22	Fri 10/26	Ch 12 The Cell Cycle, Ch 13 Meiosis and Sexual Life Cycles	LAB 9 Cell Division
12	Mon 10/25	Fri 11/2	Ch 14 Mendel and the Gene Idea, Ch 15 The Chromosomal Basis of Inheritance	
13	Mon 11/5	Fri 11/9	Ch 16 The Molecular Basis of Inheritance, Ch 17 Gene Expression: From Gene to Protein	Lab 10 DNA Fingerprinting
14	Mon 11/12	Fri 11/16	Ch 18 Regulation of Gene Expression	LAB 11 Genetics
15	Sat 11/17	Sun 11/25	Fall Break	[Enter items due]
16	Mon 11/26	Fri 11/30	EXAM REVIEW	[Enter items due]

Week	Begins	Ends	Objectives & Reading Assignments	Items Due
Finals	Mon 12/3	Friday 12/7	FINALS EXAMS	[Enter items due]

### Syllabus Disclaimer:

Information contained in this syllabus is, to the best knowledge of this instructor, considered correct and complete when distributed to the student. The instructor reserves the right, acting within policies and procedures of Lake-Sumter State College, to make necessary changes in course content or instructional techniques without prior notice or obligation to the student.