Lake-Sumter State College Course Syllabus

Course Information:
Course Prefix and Number: BSC 1005
Course Title: Introduction to Life Science
CRN: 10085
Credit Hours: 3
Semester: Fall 2019
Class Days, Location, Time: Fully online. Students will be required to schedule and attend a one hour online meeting during the last three weeks of the course for a group presentation.

Course Description: A non-technical course designed for the student not planning to continue in biological science. Man’s structure and function will be stressed as well as his relationship to other living things and to his environment.

Instructor Information:
Name: Christopher Leibner
E-Mail: Leibnerc@lssc.edu
Office Location: Sumter Campus Building 4-4114; South Lake Campus SH Building Room 217
Phone: 352-568-0001 extension 1021
Office Hours: Sumter Campus Monday 9:30-11:30AM and Wednesday 10:00-12:00PM; South Lake Campus Tuesday and Thursday 8:30-9:30AM and 3:30-4:30PM; Online Fridays 8:00-10:00AM via Canvas

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 instructions on activating Lakehawk Mail.
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: None
Co-requisites: None
Textbook & Other Course Materials:
Essential Biology (with Physiology chapters) 7th Ed. by Campbell and Modified MasteringBiology. Pearson.

Technology Requirements:
As this is a fully online course students are assumed and expected to be computer proficient and have access to a reliable computer and internet service for the duration of the course.

Canvas is a required component of this course. Students unfamiliar with Canvas are expected to complete the Student Orientation course located in Canvas within the first week of classes.

YouTube is used to host some of our video content. Links to video content are posted in each Weekly Content Module. Video content is close captioned. You can learn more about YouTube here at the YouTube Home Page (https://www.youtube.com)

A Pearson’s Modified MasteringBiology Account is required to access the text, course content and complete assignments. The process for purchasing access to MasteringBiology will be detailed during the first week of class.

Major assignments need to be created and saved in a file format that is compatible with Microsoft Word and PowerPoint. If using a processing program other than Word and PowerPoint, it is the student’s responsibility to adhere to all formatting and submission requirements.

See the [LSSC Student Technology Help Desk webpage](https://www.youtube.com) for more information about accessing Microsoft Office 365.

Course 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. After successful completion of this course, the student will...

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 affect 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 the college catalog for complete statement.

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 Disability Services.

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:
Initial Attendance:
Initial attendance will be entered at the end of the second week of the semester/mini-semester. A student who has not met initial attendance requirements will be marked as “not-attending” and administratively withdrawn from the class. The withdrawn student is still financially responsible for the class. See the college catalog for more details.

Withdrawal:
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:
Monday, October 28th, 2019
Instructor Policies:

ATTENDANCE:

Attendance is monitored according to contributions to scheduled meetings, timely access of our Canvas course, Canvas Inbox and Lakehawk mail, and submission of activities and assessments. Students must complete the scheduled activity or assessment to record and receive credit for attendance.

All activities and assessments must be completed during the scheduled periods according to the Course Calendar or as set during the course per the Syllabus Disclaimer.

Absences are not excused except under extenuating, documented emergencies at the discretion of the instructor.

In seated and hybrid sections missing a total of five or more scheduled meetings may result in failure of the course.

Attendance credit and/or class points may be withheld, reduced or removed for poor quality work and/or disruptive, disrespectful, or dishonest behavior as described in the student handbook.

Students will be required to collaborate on class activities and assessments and expected to maintain timely communication with classmates during the progress of such activities. Students are expected to maintain the following standards: 1. Check and reply to messages at least once a day. 2. Don’t expect others to wait until the day an assignment is due to hear from you. 3. Don’t expect others to have assignments done before the weekend. 4. If you need some time to get an answer or complete something for a classmate, let them know when they can expect to have it from you. Students that do not adhere to these standards may be removed from an activity or assessment work group or receive reduced or no credit.

In the event of an emergency, as determined by the instructor and institution, a make-up activities and assessments made be schedule and must occur as soon as reasonably possible. Personal technical difficulties are not considered to be valid emergencies for missing any portion of the class.

Students may be required to make-up an activity or assessment proctored by an alternate instructor, with an alternate section, on an alternate campus or online, or in the Center for Teaching and Learning.

It is the student’s responsibility to document an emergency with the instructor and institution and collaborate with the scheduling of any make-up activities or assessments.

Late Work/Extensions:
Assignments are due as scheduled on the course calendar for full credit.

Partial credit may be awarded for completing assignments after the due date at the instructor’s discretion. Partial credit is 50% of the final grade of the assignment 24 hours after the deadline. Partial credit is reduced to 25% of the final grade 48 hours after the assignment has expired. No partial credit is awarded after 48 hours.

Extensions and partial credit are not available for activities or assessments that are scheduled as live or synchronous events such as class or lab activities and student presentations.

Classroom Etiquette:
Treat everyone with respect at all times, and in all communications. When corresponding with others online always adhere to the same standards of behavior you follow in real life.
And please use proper grammar and a positive tone. Avoid casual “netspeak” like “u,” “r,” "omg,” and “lol”, and refrain from using all CAPITAL LETTERS as idiosyncratic language may be interpreted differently than intended.

Material will be presented efficiently and effectively, to the best of the instructor’s ability, to prepare students for successful completion of course requirements and objectives and successful learning outcomes.

Your instructor answers emails within 24 hours of receipt during the work week and with 48 hours of receipt during weekends and holidays. Assignments are graded with meaningful feedback within 14 days (2 weeks) of the due date or to be notified of a delay (not including college holidays, such as Thanksgiving, and Spring Break).

Test scores and final grades can only be given through LOIS, Canvas, in person, or over the phone. Scores will not be e-mailed via Lakehawk.

The most serious action per the student handbook will be taken against conduct in violation of institutional and course policies including disruptive behavior, academic dishonesty and plagiarism.

Grading Information:

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

Methods of Evaluation:
Weekly Quizzes, Thee Exams, Two Discussion Board Responses, One Ecology Survey Project, One Written Report, One Group Presentation,
## Assignment Overview & Grade Breakdown:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Points or %</th>
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<tbody>
<tr>
<td><strong>Home Work/Quizzes</strong></td>
<td>Ten Weekly Content Quizzes completed online through MasteringBiology</td>
<td>1% Each</td>
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<td><strong>Exams</strong></td>
<td>Three Exams are delivered online through Canvas. Exams consist of multiple formats including multiple choice, fill-in-the-blank, matching, and essay questions. The content for each exam is as follows:</td>
<td>15% Each</td>
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<tr>
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<td>Exam 1: Scientific Method, Chemistry &amp; Organic Molecules; Cell Structure</td>
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<td>Exam 2: Diversity and Ecology</td>
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<td>Exam 3: Cellular Reproduction; Genetics and Inheritance</td>
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<td><strong>Diversity and Ecology Survey</strong></td>
<td>Each student completes a photographic survey of an ecosystem to find and identify components of the ecosystem and important native and invasive species.</td>
<td>5%</td>
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<td><strong>Discussion Board Responses</strong></td>
<td>Each Student writes and responds to two topic discussions. Responses should be 500 words in length and will be graded electronically using a rubric provided when the assignment is given. Discussion topics are as follows:</td>
<td>5% Each</td>
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<td>Discussion 1: Citizen Science</td>
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<td>Discussion 2: Definition of Life</td>
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<td><strong>Written Report</strong></td>
<td>Each student submits a written report. The report involves generating a family health history pedigree and reporting on the genetic patterns of inheritance of selected traits within your own family. Reports should be 1,000 words in length and will be graded electronically using a rubric provided when the assignment is given. Work will be judged against accepted academic standards for writing and documentation.</td>
<td>15%</td>
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<td><strong>Group Presentation</strong></td>
<td>Each student participates within a small group to compose and deliver a PowerPoint presentation online. The class will be divided into small groups according to topic of the individual written reports. Groups and the instructor will schedule one hour together during the last two weeks of the semester to meet online for the presentation. Presentations will be graded electronically using a rubric provided when the assignment is given. Work will be judged against accepted academic standards for writing and documentation.</td>
<td>15%</td>
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Course Calendar:
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<tr>
<th>Week</th>
<th>Begins</th>
<th>Ends</th>
<th>Objectives &amp; Reading Assignments</th>
<th>Items Due</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug. 19</td>
<td>Aug. 25</td>
<td><strong>Week 1 Content Module:</strong> Introduction to Biology - Orientation; Introduction to Biology and Scientific Method</td>
<td>Week 1 Quiz</td>
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<tr>
<td>2</td>
<td>Aug. 26</td>
<td>Sep. 1</td>
<td><strong>Week 2 Content Module:</strong> Essential Chemistry for Biology</td>
<td>Week 2 Quiz</td>
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<td>3</td>
<td>Sep. 2</td>
<td>Sep. 8</td>
<td><strong>Week 3 Content Module:</strong> The Molecules of Life - Organic Molecules; Polymerization; Carbohydrates and Lipids; Amino Acids; Nucleic Acids</td>
<td>Week 3 Quiz; Discussion Posting 1: Citizen Science due 9/8</td>
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<tr>
<td>4</td>
<td>Sep. 9</td>
<td>Sep. 15</td>
<td><strong>Week 4 Content Module:</strong> The Structure and Function of DNA - DNA Replication; Transcription; Translation</td>
<td>Week 4 Quiz</td>
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<td>5</td>
<td>Sep. 16</td>
<td>Sep. 22</td>
<td><strong>Week 5 Content Module:</strong> A Tour of the Cell - Prokaryotic Cell; Eukaryotic Cell; Organelles; Viruses</td>
<td>Week 5 Quiz; Discussion Posting 2: Definition of Life due 9/22</td>
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<td>6</td>
<td>Sep. 23</td>
<td>Sep. 29</td>
<td>Exam 1 available on Canvas 9/23 8:00AM - 9/29 11:59PM</td>
<td>Exam 1</td>
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<td>7</td>
<td>Sep. 30</td>
<td>Oct. 6</td>
<td><strong>Week 7 Content Module:</strong> Communities and Ecosystems - Ecology; Trophic Structure;</td>
<td>Week 7 Quiz</td>
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<td>8</td>
<td>Oct. 7</td>
<td>Oct. 13</td>
<td><strong>Week 8 Content Module:</strong> Communities and Ecosystems - Material and Energy Cycling</td>
<td>Week 8 Quiz</td>
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<tr>
<td>9</td>
<td>Oct. 14</td>
<td>Oct. 20</td>
<td>Exam 2 available Canvas 10/14 8:00AM - 10/20 11:59PM</td>
<td>Exam 2; Diversity and Ecology Survey due 10/20</td>
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<td>10</td>
<td>Oct. 21</td>
<td>Oct. 27</td>
<td><strong>Week 10 Content Module:</strong> Cellular Reproduction, Cells from Cells - Binary Fission, Mitosis, Meiosis</td>
<td>Week 10 Quiz</td>
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<td>11</td>
<td>Oct. 28</td>
<td>Nov. 3</td>
<td><strong>Week 11 Content Module:</strong> Patterns of Inheritance - Mendelian Genetics; Mono/Dihybrid Crosses; Phenotype and Genotype</td>
<td>Week 11 Quiz; Family Pedigree and Topic Summary due 11/3</td>
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<td>Week</td>
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<td>12</td>
<td>Nov. 4</td>
<td>Nov. 10</td>
<td>Week 12 Content Module: How Genes are Controlled - Gene Expression; Gene Regulation; Cell Signaling; Cloning; Genetic Basis for Cancer; Epigenetics</td>
<td>Week 12 Quiz Pedigree Project Groups arranged - You’ll receive a Bb message when your group is ready</td>
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<td>13</td>
<td>Nov. 11</td>
<td>Nov. 17</td>
<td>Group work this week</td>
<td>Pedigree Project Individual Written Reports due 11/17 \Register for Date/ Time for Pedigree Project Group Presentation by 11/17</td>
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<td>College Holiday 11/11</td>
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<tr>
<td>14</td>
<td>Nov. 18</td>
<td>Nov. 24</td>
<td>Group Presentations this week</td>
<td>Topic Summary for Pedigree Project Group Presentation due 11/24</td>
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<tr>
<td>15</td>
<td>Nov. 25</td>
<td>Dec. 1</td>
<td>Group Presentations this week</td>
<td>Pedigree Project Presentations due as scheduled</td>
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<td>Classes End 11/26</td>
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<td>College Holiday 11/27 - 12/1</td>
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<td>16</td>
<td>F</td>
<td>Dec. 7</td>
<td>Final/Exam 3 available on Canvas 12/2 8:00AM - 12/7 11:59PM</td>
<td>Pedigree Project Presentations submitted and recorded by 12/7 Exam 3</td>
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<td>Finals</td>
<td>Dec. 2</td>
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<td>Finals Begin 12/2</td>
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<td>Finals End 12/7</td>
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**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.