CASPER COLLEGE COURSE SYLLABUS

Course Number and Title:  
Biol 1000, Introduction to Biology I

Semester/Year:  
Spring 2015

Lecture Hours: 3  
Lab Hours: 3  
Credit Hours: 4

Class Time:  
Section 01: 9-9:50 am  
Days: MWF  
Section 02: 11-11:50 am  
Days: MWF

Room:  
Section 01: LS 209  
Section 02: LS 209

*You must be scheduled for one of Labs A or B on Wednesday OR C, D, or E on Tuesday in LS 203 in addition to the lecture (from Clifford).

Instructor’s Name:  
Tom Clifford, Ph.D.

Instructor’s Office #:  
Clifford  
LS 207  
268-2687

Instructor’s e-mail:  
clifford@caspercollege.edu

Office Hours:  
See schedule on office door.

Course Description:
A study of the cell as the unit of life, the chemistry of life, and an overview of the functioning of organs and organ systems of vertebrates. General biological topics including genetics, homeostasis, structure/function relationships, ecology, and evolution are emphasized. This course is appropriate for biology and biology-related majors, especially those pursuing health-related degrees such as nursing, medical technology, occupational therapy, physical therapy, etc. It also fulfills the laboratory science requirements of such majors as education, social and behavioral sciences, humanistic studies, English, etc. as directed by your academic adviser. Biology at the high school level is desirable but not required.

Statement of Prerequisites:  None

Goal:  
To present to the student the basic concepts of matter, energy, and the cell. Further, to build on these concepts such that the student becomes acquainted with the organization, structure and function of living systems.
Outcomes**: As a result of successful completion of BIOL 1000, students shall be able to:

1. Define the basic structure of the atom
2. Describe the difference between organic and inorganic molecules
3. Match organelle structure with function
4. Explain the need for enzymes in the maintenance of living things
5. Discuss cell division processes
6. Distinguish the workings and interdependence of the musculoskeletal, circulatory, respiratory, digestive, excretory, immune, lymphatic, reproductive, nervous and endocrine systems in the human body.
7. Understand basic genetics and principles of chemical and organic evolution.

The degree to which the student achieves these outcomes is dependent on the effort provided by the student and is reflected in the grade earned in this class.

Methodology: Introduction to Biology is directed at students who often will take no further courses in biology or related fields. For this reason, emphasis is placed on material that will enable the student to understand physiological processes related to everyday life. Basic human anatomy is presented in the lab (manikins) and a representative mammal will be dissected (fetal pig).

Text, Readings, Materials:
Lecture: No Text Required.
Lab: Handouts provided.

Last Date to Change to Audit Status or Withdraw with a W Grade: Students will be allowed to withdraw or change to audit status at any time **prior to the scheduled “last day to drop” set by the Registrar’s office (April 16th this semester)**.

Attendance: There will be no penalty for missed lectures and no “pop” quizzes. **HOWEVER, it is YOUR** responsibility to round up missing notes and to be aware of what has been assigned or discussed in class as well as dates for scheduled lecture and lab exams.

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

It is the policy of Casper College to provide appropriate accommodations to any student with a documented disability. If you have a need for accommodation in this course, please make an appointment to see me at your earliest convenience.
LAB: Lab is worth 400 points. Four lab exams worth 100 points each will be given during the term (see lab schedule). You will not receive a separate final grade for lab. The lab points will count for about 30% of your final course grade. (See lab schedule). There are no makeups for lab exams.

If you know you will be missing a lab test, you can take it with one of the other labs.

LECTURE: Lecture is worth approximately 70% of your course grade. PLEASE DO NOT WRITE ON THE EXAM BOOKLETS. There will be 8 lecture exams of the objective type covering Units 1-8 (See Lecture Topics). Each will be 50 questions worth a total of 100 points (2 points per question). THERE WILL BE NO MAKEUPS FOR LECTURE EXAMS. If you take all 8 lecture exams and all 4 lab exams, the lowest 2 exams will be dropped*. If you are missing tests, they will count as your dropped exams.

*Under extraordinary circumstances, if a 3rd lecture or lab exam is missed I may replace the score with the average of your other exams.

Grades will be assigned on the following basis:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90%</td>
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<tr>
<td>B</td>
<td>80%</td>
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<tr>
<td>C</td>
<td>70%</td>
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<td>D</td>
<td>60%</td>
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<tr>
<td>Below 60%</td>
<td>Failing</td>
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A total of 10 of your 12 exams will be included in your final point total (8 lecture & 4 lab minus your “throw out” exams --- see above.

Additional Information:

1. On each lecture exam, I will curve the grade scale 4% to make up for any “wrongs” that may occur on lecture exam questions.

2. All lecture exams will be given during the lecture time scheduled in the room scheduled for lecture (LS 209).

3. All lecture exams are objective (multiple choice, true-false, matching).

4. You will always get your results back within 1 class period of taking your exam (next lab or lecture period).

5. Pre/Post Exam: You are required to take a pre and post exam for this course. The pre-test is scheduled for your 1st lab period 1/20 and 1/21. If you miss this date a make-up can be taken during your next lab. The post test is scheduled for your last lab period on 5/5 and 5/6. If you are missing either the pre or post score at the time final grades are given, you will not receive the benefit of any curve applied to the grade scale.
6. Mid-Term Grades: You will not receive an accurate mid-term grade if any test grades are missing.

7. Privacy Act: On every exam answer sheet you must print first and last name on the front and back. When exams are returned they must remain face down while you identify your exam answer sheet.

8. There will be ZERO tolerance of cheating. Those students caught cheating will receive an “F” grade for the course (see student handbook).

9. No cell phones or other communication or listening devices except recorders or computers used for taking notes.

10. ABSOLUTELY NO ELECTRONIC DEVICES OF ANY KIND DURING EXAMS.

11. You must average 60% on at least 3 of the 4 lab exams to pass this course!

12. THIS COURSE INVOLVES DISSECTION OF A REPRESENTATIVE MAMMAL IN LAB AND LECTURE MATERIAL INCLUDES DISCUSSION OF ANATOMICAL STRUCTURES AND FUNCTIONS. IF YOU ARE UNCOMFORTABLE WITH THIS MATERIAL, PLEASE CONSIDER TAKING A DIFFERENT COURSE FOR YOUR LAB SCIENCE!

13. Student complaints should be addressed through the following chain of command:
   1. The instructor of your course (Dr. Tom Clifford)
   2. The Biology Department Head (Dr. Scott Johnson)
   3. School of Science Dean, (Dr. Grant Wilson)
   4. The Vice President for Academic Affairs (Dr. Tim Wright)
Lecture Exams by Topic

All lecture exams are worth 100 points for a total of 800 points. See testing policy for more information.

Exam 1  Introduction, Biological Chemistry, The Cell, & Evolution
Exam 2  Cell Division, Protein Synthesis, Cellular Respiration (Metabolism), General Metabolism, and Genetics
Exam 3  Integument, Skeletal System and Muscular System
Exam 4  Digestive and Excretory Systems
Exam 5  Cardiovascular System
Exam 6  Respiration, Again & Cancer
Exam 7  Reproductive & Nervous Systems
Exam 8  Endocrine System

Lab Exams by Topic*

All lab exams are worth 100 points for a total of 400 points. See testing policy for more information.

Exam 1  Microscope, Tissues, Cell Division & Cell Structure (Labs #1 & #2)
Exam 2  Skeletal System (Lab #3)
Exam 3  Respiratory & Digestive System (Lab #4)
Exam 4  Cardiovascular & Reproductive Systems (Lab #5)

*See Lab Schedule
### BIOL 1000 - LAB SCHEDULE – Spring 2015

<table>
<thead>
<tr>
<th>Week</th>
<th>Lab Date</th>
<th>Content</th>
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<tbody>
<tr>
<td>1</td>
<td>1/20</td>
<td>Pre Test</td>
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<td>1/21</td>
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<td>2</td>
<td>1/27</td>
<td>Lab #1 – Microscopes &amp; Tissues</td>
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<td>3</td>
<td>2/3</td>
<td>Lab #2 – Cell Division &amp; Structure</td>
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<td>4</td>
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<td>Exam 1 – over Labs #1 &amp; #2</td>
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<td>Lab #3 – Skeletal System</td>
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<td>Lab #4 – Digestive &amp; Respiratory Systems</td>
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<td>10</td>
<td>3/31</td>
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<td>Advising Week – no labs</td>
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<td>4/14</td>
<td>Lab #5 – Cardiovascular &amp; Reproductive Systems</td>
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<td>Post Text</td>
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The week of March 15-21 is Spring Break.