Instructor Information
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Course Information
Course Title: Biology fo Science Majors 2
Course Number: Biology 1407
Section Number: 77430
Semester/Year: Fall 2019
Credit Hours: 4
Class Meeting Time/Location: INET lecture and LAB
Certification Date: 8/31/2019
Last Day to Withdraw: 10/3/2019

Course Prerequisites
Prerequisite Required: BIOL 1406.

Course Description
An introductory survey of current biological concepts for students majoring in the sciences. The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Laboratory activities will reinforce study of these concepts. (3 Lec., 3 Lab.)
Student Learning Outcomes

Lecture Class Learning Outcomes:

The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

Upon successful completion of this course, students will:

- Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
- Describe phylogenetic relationships and classification schemes.
- Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
- Describe basic animal physiology and homeostasis as maintained by organ systems.
- Compare different sexual and asexual life cycles noting their adaptive advantages.
- Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

Laboratory Class Learning Outcomes:

This laboratory-based course accompanies Biology 1307, Biology for Science Majors II. Laboratory activities will reinforce study of the diversity and classification of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

Upon successful completion of this course, students will:

- Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
- Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
- Communicate effectively the results of scientific investigations.
- Demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
- Distinguish between phylogenetic relationships and classification schemes.
- Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
- Describe basic animal physiology and homeostasis as maintained by organ systems.
- Compare different sexual and asexual life cycles noting their adaptive advantages.
• Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

Texas Core Objectives
The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

2. **Communication Skills** - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication

3. **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

4. **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

5. **Personal Responsibility** - to include the ability to connect choices, actions, and consequences to ethical decision-making

6. **Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

Required Course Materials
Lecture Materials Text:
Biology (North Lake College Custom Version)
or you may purchase the entire book (please see my note on this below).

Author: Campbell/Reece
Custom North Lake Only Book ISBN: 9781269967365
Copyright Year: 2011
Publisher: Pearson Learning Solutions

*My personal note. Please consider using the larger edition of the book. It will assist you in future classes (anatomy and physiology, ecology, microbiology, and any upper division zoology or botany class). Campbell’s 11th edition is the latest version. The 9th or 10th would be adequate for your understanding. There will be no required work out of
the text book. A copy has been made available to you in the library and the STEM Center in L137.

Computer Requirements: Please have the Microsoft Office Suite. A free copy of Microsoft Office is available to you while you are a DCCCD Student. You should be able to view power point, author documents, hear audio and play MP4 video files. Also you should have a computer that is adequate to run basic blackboard functions. We may have collaborate sessions. While a webcam and mic will enhance your ability to participate, there is a very good chat client that will allow you to participate adequately without those tools.

Pearson Mastering Biology: You do not need the access code! There is a Mastering Course for you to access if you already have a code and wish to use it. The materials on the mastering site will help, and the e-book is pretty handy. However, it is not required.

**Laboratory Materials**

Text: None – this is an Open Educational Resource Lab (OER) – no text or lab kit is needed to complete this lab.

Materials: You may need some materials to complete your lab. Please see each individual lab to determine what it is you need to complete the learning objectives. Whenever possible we have even offered some inexpensive alternatives and allow for creativity in the set-up.

Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

**Graded Work**

Your grade is based on a combination of lecture exams, journals, quizzes, surveys, lab assignments etc. – in reality whatever I give you in class could be part of your grade configuration. The table below will outline how your grade is calculated.

**Some important notes:**

- Pay attention to due dates for quizzes, journals, and all other assignments. When an item expires, it will no longer be available to take.
- Additional graded items may be assigned during the semester, however this is unlikely
• Lecture exams will be given in the testing center at North Lake College (north, central, and south campus locations) and must be completed before the deadline expires.
• You may propose an alternate location for testing; however, that must be done with approval and may take up to two weeks to complete. The instructor reserves the right of approval in all non-North Lake testing centers.
• Lecture exams are computer based and you will not need additional testing materials.
• Please see the course calendar for due dates for the exams. There is flexibility built in to the course, but in order to promote the best learning experience, the dates for exams are final and non-negotiable. If you encounter a mitigating circumstance that prohibits you from completing your assignments on time you may appeal. First, you must have extreme circumstances. Secondly it must be extensively documented. Third, if extra time is warranted, the attempt will not be eligible for curve, bonus, or retaking.
• Exams and assignments are to be completed on-time, without exception. Should unusual circumstances arise, regardless of their nature, they must be well documented, subject for interpretation, and extreme.
• Ultimately the successful completion of this course is upon the learner to stay on-task and progress through the course.

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated.

**Summary of Graded Work**

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllabus/Intro Quiz</td>
<td>1 @ 10 points</td>
<td>10 points</td>
</tr>
<tr>
<td>Chapter Quizzes</td>
<td>6 @ 10 points each</td>
<td>60 points</td>
</tr>
<tr>
<td>Exams (70% lecture, 30% lab questions)</td>
<td>6 @ 100 points each</td>
<td>600 points</td>
</tr>
<tr>
<td>Lab units</td>
<td>6 @ 20 points each</td>
<td>120 points</td>
</tr>
<tr>
<td>Lab Safety</td>
<td>1 @ 10 points</td>
<td>10 points</td>
</tr>
<tr>
<td>Journal 1</td>
<td>1 @ 10 points</td>
<td>10 points</td>
</tr>
<tr>
<td>Journal 2</td>
<td>1 @ 40 points</td>
<td>40 points</td>
</tr>
<tr>
<td>SLO’s</td>
<td>3 @ 10 points</td>
<td>30 points</td>
</tr>
<tr>
<td>Planet Project</td>
<td>1 @ 250 points</td>
<td>250 points</td>
</tr>
</tbody>
</table>
TOTAL: 1,130 points

### Final Grade

<table>
<thead>
<tr>
<th>Points</th>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1105-1,130</td>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>1080-1104</td>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>1055-1079</td>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>1030-1054</td>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0-1029</td>
<td>0-59%</td>
<td>F</td>
</tr>
</tbody>
</table>

### Description of Graded Work

Each exam may be taken twice, with your grade the average of those two attempts. If you score lower on the 2nd attempt, it will lower your grade.

- Each unit quiz has unlimited attempts. Your grade will be the average all attempts.
- Quizzes, journals, etc. are due at the same due date of corresponding exams.
- Journals will be strictly graded according to the rubric provided. Please follow those instructions carefully. Plagiarism will be severely punished.
- The Planet Project will be explained in class. A rubric will be provided.
- **IMPORTANT:** YOU MUST COMPLETE THE HAND-IN SECTION OF THE INET LAB ACTIVITIES OR YOUR SCORE FOR THE END OF LAB ASSESSMENT WILL BE ZERO! You do not get graded on the portion you necessarily turn in, it’s a completion score, but if you do not turn it in, or it is inadequate it will zero out your end of lab assessment.

Bonus opportunities may be possible. Check announcements or ask about opportunities.

### Late Work Policy

Exams and assignments are to be completed on-time, without exception. Should unusual circumstances arise, regardless of their nature, they must be well documented, subject for interpretation, and extreme.

### Other Course Policies

Please read this section carefully. These policies are important to me!

**E-mail Policy:**
E-mail will be checked on Monday mornings and you can expect about a 24hr turn around on all emails during the work week. I check my email for the last time Friday at noon, and you can expect all weekend emails to be answered the following Monday. Knowing that I will not check my email over the weekend, please consolidate your ideas. I would cringe to see an inbox with multiple emails from a single user. Hardly something to laugh about, but I once had 30 emails from a single student over a weekend. Certain e-mail subjects will be ignored. Per FERPA guidelines I cannot discuss your grades over email. I will also not respond to any emails that ask for an “extra day” or “extra time.” The district has a very tight SPAM filter, and if you do not feel like your email is being addressed in a timely manner, call me. Please keep all communications respectful and classy.

Students will not send unsolicited email espousing a cause, religion, or activity to other class participants and will not add other class participants to any listserves or other entity which distributes unwanted email or material.

End of Class Procedures:
When this class ends, it ends. When the final exam deadline passes, I will take down the entire course. I do this so I can configure the grades properly. This means that if you wish to preserve anything from the course, you should make sure that you have downloaded your gradebook or any materials before that day.

My Academic Dishonesty Policy:
I will not tolerate cheating. If you are caught plagiarizing your journals, cheating in the testing center, or other manners or cheating, my penalty is failure in the entire course. Not just an F on the assignment, you will fail the course.

Quiz Policy:
I get a lot of questions about my quizzes and I would like to address it here. When you take a quiz, it does not tell you what you got right and what you got wrong. This is intentional. Like a good science experiment, we run the process and then we get results. Interpreting the results is the cornerstone of the scientific process. We often don’t know what went right and what went wrong. The science, is sorting this out. You will get the hang of it. With the quizzes I encourage you to collaborate with others, talk through the answers, and learn. When you reaffirm you got something right, you have taken the guesswork out of future responses. When you research something you thought you got right, but in-fact got wrong, you truly learn. Lastly, when you research a question you got completely wrong, you are uncovering areas you may need to study further.
Certification of Attendance Policy:
You have four assignments to complete in the first week. You must (1) to post in the discussion board, (2) complete the first journal, (3) join the GroupMe app and (4) take the intro quiz. The intro quiz is imperative because this is what I use to certify your attendance. Which means if you skip this or complete it late, it may impact your financial aid status in the class! If you click on the START HERE link in e-campus more information is available. (use the navigation on the left and look for "START HERE")

Computer Glitch Policy:
You may encounter a computer glitch while you are taking a quiz. This happens. I empathize, it happens to me all the time. So here is what you do. Make sure you have documented the glitch. Secondly, save your documentation. Please do not ask for quiz resets as I will not be resetting quizzes over the semester. Usually I can see that the glitch has occurred because it looks like the quiz was abandoned – I will delete two glitch quizzes per student over the semester. If you think somehow quiz glitches have altered your final grade, you may present your documentation for consideration of a grade recalculation. I can tell you that in the history of teaching this class, that has never occurred, but I am willing to accept the discussion. Systemic and habitual computer failure will be considered a student’s responsibility.

Institutional Policies
Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

North Lake Institutional Policies (http://www.northlakecollege.edu/syllabipolicies)

Course Schedule

<table>
<thead>
<tr>
<th>Unit</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Journal 1 and Intro/Syllabus quiz</td>
<td>Week 1</td>
</tr>
<tr>
<td>Unit 1 exam and Quiz</td>
<td>Week 2</td>
</tr>
<tr>
<td>Unit 2 exam and Quiz</td>
<td>Week 4</td>
</tr>
<tr>
<td>Unit 3 exam and Quiz</td>
<td>Week 5</td>
</tr>
<tr>
<td><strong>Unit</strong></td>
<td><strong>Due Date</strong></td>
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<td>--------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Unit 4 exam and Quiz</td>
<td>Week 6</td>
</tr>
<tr>
<td>Unit 5 exam and Quiz</td>
<td>Week 7</td>
</tr>
<tr>
<td>Unit 6 exam and Quiz</td>
<td>Week 8, Due by Thursday at 5pm</td>
</tr>
<tr>
<td>Planet project</td>
<td>Monday of Week 8 by 12pm</td>
</tr>
<tr>
<td>3 SLO quizzes</td>
<td>Thursday of Week 8 by 5pm</td>
</tr>
<tr>
<td>Journal 2</td>
<td>Thursday of Week 8 by 5pm</td>
</tr>
<tr>
<td>Any other assignments</td>
<td>Thursday of Week 8 by 5pm</td>
</tr>
</tbody>
</table>