Instructor:  J. Colleen Ambler-Biles  
E-mail:  jambler-biles@dccc.edu

Course Description

INET Biol 1408 is designed for students who are not majoring in science. Selected topics in biology are presented to students to promote their understanding of biological concepts and to enable them to use these concepts in their daily lives. Topics include life chemistry, the cell, respiration, photosynthesis, cell reproduction, and genetics.

Prerequisite - None.

Instructional materials needed for INET Biol 1408

The following instructional materials are needed to complete this course. They are available from the DCCCD BHC and NLC Follett bookstores or www.follet.com.


2. **Lab-Internet Access Code** – Totally Online Basic Biology I card by Shelp ISBN 978-1-467-54470-2. You can purchase the card at the campus bookstores mentioned above. The access code will allow you to view the online labs. It is a one use only access code and may not be used to repeat the course.

Introduction

The world today is dominated by science and technology. Students majoring in fields other than science will need a science background to function effectively in most jobs today. Students majoring in business may find themselves in accounting, marketing, or sales for a company which produces high-tech products in the area of defense, electronics, food production, and genetic engineering. Regardless of your vocational endeavor, your life is affected by science.

Responsible citizenship today requires informed decisions related to such topics as radiation, toxic waste, safe housing, transportation, genetically modified foods, and health. These decisions require a background in science. The instructor will present the concepts of biology in a context that will help you effectively read science related articles in daily newspapers and periodicals such as *Time*, *Newsweek*, *Discovery*, and *National Geographic*. 
Procedure

The method of teaching employed in INET Biol 1408 approaches the learning process from the point of view that learning is something done by you the student, not something done to you. The student is responsible for his/her own learning. The instructor will facilitate the investigative learning process by assigned readings, chats, discussion boards, reviews, practice quizzes, test, etc. Follow your Schedule. This is not a self-paced course.

The MAJOR contributing factor to student failure in this class is procrastination.

Text Assignments
The text assignments consist of assigned reading in Biology-Concepts & Applications. You will take four tests (1 per week) over the content of the reading assignments.

Laboratory
The laboratory activities will provide you with the opportunity to participate in the scientific process by using an Internet Access Code. Read each laboratory assignment carefully as you work through the online lab. Complete a Lab Report using the templates found at www.biolabmanual.com. Submit the Lab Report via email attachment to your instructor. Submit early enough to allow 24 hours for grading and time for you to take the quiz. Your instructor will evaluate the lab and, if satisfactory, provide a password so you can compare your answers to the Answer Keys also available at www.biolabmanual.com. When you are sure you understand the concepts of that lab you will take a ten point multiple choice quiz online located in your Blackboard course.

Tests
A total of four online tests, worth 50 points each, will be given during the semester. You will take a comprehensive final exam at the end of the semester. Please see the semester course schedule for details about the time frame for each part of the course.

Locks on Quiz or Test in Gradebook
If you see an exclamation point (!) in place of a grade, you have gone over the time limit. A 1 point deduction is taken for every minute over the time limit, so watch your time carefully.

If you see a lock in place of a grade, you had a computer error or selected the back arrow during your exam. Your test is locked and will have to be cleared to retake the test. For security measures, one unlock is allowed without penalty. Be sure you are on a reliable computer and do not use the back arrow.

Discussion Boards
You are asked to participate in two Discussion Boards. To receive full credit you must add a new post following the instructions for each DB and reply to at least one other student’s post. To add a new post, select the “+ Thread” button in the upper left corner of the discussion board screen. To respond, select “Reply” below the thread you are replying to. Anonymous messages on the discussion are NOT allowed.
How Your Grade Is Determined

The course grade is determined on the basis of the following point system.

<table>
<thead>
<tr>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 441 - 490</td>
<td>A = 90 - 100</td>
</tr>
<tr>
<td>B = 392 - 440</td>
<td>B = 80 - 89</td>
</tr>
<tr>
<td>C = 343 - 391</td>
<td>C = 70 - 79</td>
</tr>
<tr>
<td>D = 294 - 342</td>
<td>D = 60 - 69</td>
</tr>
<tr>
<td>F = 0 - 293</td>
<td>F = 0 - 59</td>
</tr>
</tbody>
</table>

You may accumulate points as follows:

1. **Textbook** A timed online multiple choice test worth 50 points will be given each week over the content of both textbook reading and laboratory.

2. **Laboratory** 10 labs will coordinate with the text material. When you complete each lab, submit your answers to the lab activities and summary questions to your instructor. Your instructor will grade your lab exercises and submit a password. This password will enable you to check your answers with the answer key for the lab. Then, using the same password, take the 10 point multiple choice quiz.

3. **Laboratory Practicals.** Two lab prakticals worth 40 points each will be given. The first Lab Practical (LP1) will cover the content of labs 1-5 and the second Lab Practical (LP2) will cover content of labs 7-11. Laboratory understanding, critical thinking skills, and the ability to interpret data will be evaluated.

4. **Special Events.** Two activities are provided which will relate the textbook biology to the world around you - they may consist of television programs, assigned movies, and other special event opportunities. Each special event will count 20 points.

5. **Discussion Board.** Two times during the semester group interaction activities will give students the opportunity to discuss issues related to topics in the course. Each discussion will count 5 points.

6. **Final Exam.** A comprehensive, 60 question multiple choice exam covering the major objectives of all textbook reading assignments will be taken at the end of the semester. Each question will count 1 point.

7. **Extra Credit.** There are two extra credit opportunities. The orientation quiz is worth 10 points extra credit and there is an assignment near the end of the semester worth 15 points.

8. **Late Policy/Makeup Week.** Only late work with a documented excuse may be made up. Notify your instructor in advance if you have a conflict with a deadline for approval to makeup the work. In case of an emergency, provide a valid, documented excuse within 24 hours of the missed deadline. Late work without documentation will not receive credit. All excused late work for the first half of the semester MUST be completed by midterm week (see your schedule for deadline). All excused late work for the second half of the semester is due prior to finals week (see your schedule for dates). Lab Reports must be completed within 48 hours of the due date for credit.
In summary:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>200</td>
<td>40%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Laboratory Practical</td>
<td>80</td>
<td>16%</td>
</tr>
<tr>
<td>Special Events</td>
<td>40</td>
<td>8%</td>
</tr>
<tr>
<td>Discussion Boards</td>
<td>10</td>
<td>4%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>60</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>490</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

* It is the student's responsibility to withdraw from the course in the event that they wish to drop out of the course. Non-completion without an official drop will result in an 'F' grade.

Disclaimer - The instructor, Brookhaven College and the Dallas County Community College District will be held blameless should the course schedule or content be changed.

The instructor reserves the right to amend this syllabus as necessary.
Student Learning Outcomes (Lecture)
Upon successful completion of this course, students will:
1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
5. Describe karyotyping, pedigrees, and biotechnology and provide an example of the uses of each.
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
7. Analyze evidence for evolution and natural selection.

Student Learning Outcomes (Lab)
Upon successful completion of this course, students will:
1. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
5. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
6. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
7. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
8. Identify the importance of karyotypes, pedigrees, and biotechnology.
9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
10. Analyze evidence for evolution and natural selection.

Core Objectives
Biology 1409 is part of the Life and Physical Sciences Foundational Component Area 030.

i. Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method.
ii. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.
iii. The following four Core Objectives must be addressed in each course approved to fulfill this category requirement:
   (A) Critical Thinking Skills: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information;
   (B) Communication Skills: to include effective development, interpretation and expression of ideas through written, oral and visual communication;
   (C) Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions;
   (D) Teamwork: to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal;
CLASSROOM POLICY

Consider eCampus as your classroom that is attended by other students taking the same course as you. Your consideration of their rights and attention to the rules of the course are important. Maintain honesty in all assignments and exams. Do not ask fellow students for specific information concerning assignments or exams. Those who study and do their own work do not appreciate this type of behavior. The instructor considers this type of behavior dishonest and will access penalties.

ATTENDANCE POLICY

Lecture attendance:
There is no attendance of a lecture for the online course. A schedule of reading assignments and exams is maintained. Print off the schedule and post in a prominent place of study. Do not fall behind on the reading, labs, quizzes, exams, and assignments.

Lab Attendance:
Each week one lab is due. Turn in your lab template as required as early in the week as you can complete the assigned lab. Earlier submission results in faster replies. Allow 24 hours for grading.

ACADEMIC DISHONESTY

The Student Code of Conduct prohibits academic dishonesty and prescribes penalties for violations. According to this code, which is printed in the college catalog, "academic dishonesty" includes (but is not limited to) cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion".  

1) The Vice-President of Academic & Student Affairs may initiate disciplinary proceedings against a student accused of academic dishonesty.

2) Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism and collusion.

3) Cheating on a test includes:
   a) Copying from another student’s test paper;
   b) Using, during a test, materials not authorized by the person giving the test;
   c) Collaborating with another student during a test without permission to do so;
   d) Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of an un-administered test.
   e) Substituting for another student, or permitting another student to substitute for you to take a test; and
   f) Bribing another person to obtain an un-administered test or information about an un-administered test.

4) “Plagiarism” means the appropriation of another’s work (ideas and/or words) and the unacknowledged incorporation of that work in one’s written work offered for credit. Quotes not identified as quotes constitute a form of plagiarism even if the borrowed ideas are documented.

5) “Collusion” means an unauthorized collaboration with another person in preparing written work offered for credit.
Academic dishonesty may result in the following sanctions, including, but not limited to:

1. A grade of zero or a lowered grade on the assignment or course.
2. A reprimand.
3. Suspension from the college.

NOTIFICATION OF ABSENCE DUE TO RELIGIOUS HOLY DAY(S)
Students who will be absent from class for the observance of a religious holiday must notify the instructor in advance. Please refer to the Student Obligations section of the college catalog for more explanation. You are required to complete any assignments or take any examinations missed as a result of the absence within the time frame specified by your instructor.

REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (A430)
Brookhaven College provides academic accommodations to students with disabilities, as defined under ADA law. It is the student's choice and responsibility to initiate any request for accommodations. If you are a student with a disability who requires such ADA accommodations, please contact Brookhaven’s Disability Services office at 972 972 4673 or College's Disability Services Office is located in “S” building (S124).

ADMINISTRATIVE WITHDRAWAL
Students with valid extenuating circumstances may be eligible for an administrative withdrawal by the Dean of the Division in which the course or courses are taught. An administrative withdrawal will not be awarded to students who simply fail to withdraw prior to the last day to receive a “W.” The request for an administrative withdrawal must be made in writing to the Dean of the Division with any supporting documentation attached. This must occur before the last official day of the semester.

DROP POLICY
If you are unable to complete this course, you must officially withdraw by “Final Day to Drop” as published on the DCCCD website (also available on the class schedule). Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you. All Dallas County Community Colleges charge a higher tuition rate to students registering the third time for a course. This rule applies to the majority of credit and Continuing Education / Workforce Training courses. Developmental Studies and some other courses are not charged a higher tuition rate. Third attempts include courses taken at any DCCCD college since the fall 2002 semester. For further information, go online to: http://www.DCCCD.edu/thirdcourseattempt.

STOP BEFORE YOU DROP
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: https://www1.dcccd.edu/coursedrops.

FINANCIAL AID STATEMENT
Grade reports are no longer mailed. Convenient access is available online. Just use your student identification number when you log in to eConnect.

Web site address: https://econnect.dcccd.edu/

How to check your grades online:

1. Go to the student menu on eConnect
2. Select "My Grades" under "My Personal Information."
3. If you are not already logged in, you will be prompted to do so.
4. Select the grade type you wish to review.
5. Press the submit button.
6. All Grades for the selected grade type will be displayed.

Note: You will need your 7 digit Student ID # and your 6 digit PIN to log in.

COUNSELING SERVICES
Counseling services for personal issues are provided to all students currently enrolled at Brookhaven College. These services are provided by licensed professionals who are bound by confidentiality (within ethical parameters) at no charge. With the assistance of a counselor, students are able to identify, understand, resolve issues and develop appropriate skills.

To make an appointment call 972-860-4339 or visit S124.

FERPA: The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. More information about the FERPA guidelines is available online in the college catalog at https://www1.dcccd.edu/catalog/about/privacy.cfm

Brookhaven College Institutional Policies Addendum can be found at the following link: Addendum.aspx http://www.brookhavencollege.edu/about/vpi/Pages/Syllabus-Addendum.aspx

Grade reports are no longer mailed. Convenient access is available online. Just use your student identification number when you log in to eConnect.

Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate are also subject to this policy. To apply for financial aid in the DCCCD, students must complete FAFSA (Free Application for Federal Student Aid) on the web at: http://www.fafsa.ed.gov

Students who fail to attend or participate are also subject to this policy. To apply for financial aid in the DCCCD, students must complete FAFSA (Free Application for Federal Student Aid) on the web at: http://www.fafsa.ed.gov
<table>
<thead>
<tr>
<th>Week 1</th>
<th>Assignment</th>
<th>Topic/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/17</td>
<td>Orientation</td>
<td>Online – See PowerPoint under “Course Information”</td>
</tr>
<tr>
<td>11/17-11/21</td>
<td>Orientation Quiz</td>
<td>Online</td>
</tr>
<tr>
<td></td>
<td>Text Reading</td>
<td>Ch 1, p 2-21; Ch 2, p 22-35; Ch 3, p 36-49</td>
</tr>
<tr>
<td></td>
<td>Lab Templates</td>
<td>Lab Templates 1 &amp; 2 submitted</td>
</tr>
<tr>
<td>11/21</td>
<td>Lab Quizzes 1 &amp; 2</td>
<td>Measurement &amp; Life Chemistry</td>
</tr>
<tr>
<td></td>
<td>Discussion Board</td>
<td>What is Life?</td>
</tr>
<tr>
<td></td>
<td>Test 1</td>
<td>Ch 1, 2, &amp; 3 (Text Reading)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 2</th>
<th>Assignment</th>
<th>Topic/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/22-11/28</td>
<td>Text Reading</td>
<td>Ch 4, p 50-73; and Ch 5, p 74-91</td>
</tr>
<tr>
<td>11/26</td>
<td>Thanksgiving Holiday</td>
<td>Lab Templates 3, 4, &amp; 5 submitted</td>
</tr>
<tr>
<td>11/28</td>
<td>Lab Quizzes 3, 4, &amp; 5</td>
<td>Microscope &amp; Cell, Cell Membranes, &amp; Enzymes</td>
</tr>
<tr>
<td></td>
<td>Special Event 1</td>
<td>Microbial Menaces (under “Course Documents)</td>
</tr>
<tr>
<td></td>
<td>Test 2</td>
<td>Ch 4 &amp; 5 (Text Reading)</td>
</tr>
<tr>
<td>11/29</td>
<td>Lab Practical 1</td>
<td>Online exam includes Labs 1, 2, 3, 4, &amp; 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 3</th>
<th>Assignment</th>
<th>Topic/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/30-12/5</td>
<td>Text Reading</td>
<td>Ch 7, p 106-121; Ch 8, p 122-135; Ch 9, p 136-149</td>
</tr>
<tr>
<td></td>
<td>Lab Templates</td>
<td>Lab Templates 7 &amp; 8 submitted</td>
</tr>
<tr>
<td>Dec 5</td>
<td>Lab Quizzes 7 &amp; 8</td>
<td>Cell Respiration and DNA</td>
</tr>
<tr>
<td></td>
<td>Discussion Board</td>
<td>Stem Cell Research</td>
</tr>
<tr>
<td></td>
<td>Test 3</td>
<td>Ch 7, 8, &amp; 9 (Text Reading)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 4</th>
<th>Assignment</th>
<th>Topic/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/6-12/12</td>
<td>Text Reading</td>
<td>Ch 10, p 150-161; Ch 11, p 162-173; Ch 12, p 174-187; Ch 13, p 188-201; Ch 15, p 220-221</td>
</tr>
<tr>
<td></td>
<td>Lab Templates</td>
<td>Lab Templates 9, 10, 11 submitted</td>
</tr>
<tr>
<td>12/12</td>
<td>Lab Quizzes 9, 10, 11</td>
<td>Mitosis, Meiosis, Basic Genetics</td>
</tr>
<tr>
<td></td>
<td>Special Event 2</td>
<td>Human Genome Project (under “Course Documents)</td>
</tr>
<tr>
<td></td>
<td>Extra Credit</td>
<td>“Extra Credit” tab in eCampus</td>
</tr>
<tr>
<td></td>
<td>Test 4</td>
<td>Ch 10, 11, 12, 13 &amp; 15 p 220-221 (Text Reading)</td>
</tr>
</tbody>
</table>

|          | Study days       | Approved make-up assignments will be accepted.                              |
| 12/13-12/15 | *Lab Practical 2 | Online Exam - Labs 7, 8, 9, 10, & 11                                         |
| 12/16 *Final Exam |               | Online Exam - All Text Reading (comprehensive)                              |

*BOLD DATES ARE DEADLINES – Must submit Lab Reports 24 hours before quiz deadline to receive the password.*