This course syllabus is intended as a set of guidelines for Biol 1408. Both North Lake College and your instructor reserve the right to make modifications in content, schedule, and requirements as necessary to promote the best education possible within prevailing conditions affecting this course.

Instructor Information:

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972-273-3500
Central Campus, P-330

Please do not leave voice mail as I will not be checking it
Course Information
Course title: Biology I for Non-Majors
Course number: 1408
Section number: 7426
Credit hours: 4
Class meeting time: Open
Course description: Biology 1408 is intended for non-science majors. Fundamental topics of biology include metric measurement, biological chemistry, cellular organization, cellular respiration, photosynthesis, cell reproduction, genetics, DNA structure and function, protein synthesis are presented.

Course prerequisites:
Biology for Non-Science Majors I (4)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards AND DCCCD Writing score prerequisite requirement. If these requirements have been met there are no other prerequisites.

Required or Recommended Textbooks and Materials


The laboratory manual will have a registration card attached inside the front cover. Please follow the instructions on the card and go to www.biolabmanual.com and register for your Internet Access Code. This code will enable you to enter the labs for Biol 1408. Textbook by Starr, Inet Laboratory Manual, and Inetlearn Access code may be purchased from Follett Bookstore, North Lake College or Brookhaven College

Course Objectives
The goal of this course is to prepare the student to be an informed and educated citizen. The course will fulfill requirements for the student that is majoring in fields other than the biological sciences. See the Course Outcomes, Exemplary Educational Objectives and the Core Curriculum Intellectual Competencies at the end of the syllabus.

Specific Course Learning Outcomes
Prescribes what students must demonstrate to successfully complete an assignment/course.
See Appendix A

Course Outline

1. Introduction: Overview of biology
2. Chemistry: Atoms, Molecules, Ions
3. Microscope and Cell
4. Cell Membranes
5. Metabolism and Enzymes
6. Photosynthesis (omitted for Sum courses)
7. Cellular Respiration
8. Nucleic Acids
9. Mitosis
10. Meiosis
11. Genetic Concepts
12. Human Genetics (omitted for Sum courses)

Means of Assessment of Course Learning Outcomes
See Appendix A

Evaluation Procedures

Every assessment/assignment is worth a particular number of points toward your total point score.

Exams and Assignments

A total of six biweekly tests, worth 50 points each, will be given during the semester. You will take a proctored midterm and final exam in the North Lake College testing center. Please see the semester course schedule for details about the time frame for each part of the course.

Lecture Exam Schedule

<table>
<thead>
<tr>
<th>Exam</th>
<th>Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam I</td>
<td>Chapters 1, 2, 3</td>
</tr>
<tr>
<td>Exam II</td>
<td>Chapters 4, 5</td>
</tr>
<tr>
<td>Exam III</td>
<td>Chapters 7, 12, 13, p 222 – 223</td>
</tr>
<tr>
<td>Exam IV</td>
<td>Chapters 8, 9, 10</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Comprehensive multiple choice</td>
</tr>
</tbody>
</table>
**Grading Scale**

Grades will be based on the following distribution:

### 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 = 450 - 500</td>
<td>A = 90 - 100</td>
</tr>
<tr>
<td>B = 400 - 449</td>
<td>B = 80 - 89</td>
</tr>
<tr>
<td>C = 350 - 399</td>
<td>C = 70 - 79</td>
</tr>
<tr>
<td>D = 300 - 349</td>
<td>D = 60 - 69</td>
</tr>
<tr>
<td>F = 0 - 299</td>
<td>F = 0 - 59</td>
</tr>
</tbody>
</table>

You may accumulate points and how the points apply to the CCICs and EEOs are as follows:

In summary:

- **Orientation** .......... 10 points 2%
- **Tests** ..........200 points 36 %
- **Laboratory** ..........100 points 18 %
- **Laboratory Practicals**......100 points 18%
- **Special Events** .......... 30 points 6 %
- **Discussion Board** .......... 10 points 2 %
- **Final Exam** ..........100 points 18%

550 points 100 %

**Biology 1408 /Math Science Sports Science/Policies**

**Classroom Policy:**
Consider the 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 labs are due as posted in the schedule. Lab submission is not self-paced. Turn in your lab template as required as early as you can complete the assigned lab. Earlier submission results in faster replies.

INSTITUTIONAL POLICIES
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".
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.
   Student’s rights to appeal grades and /or other disciplinary action and the procedures which students must follow for appeals are published in the College Catalog under the “Code of Student Conduct”.

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.
*Each week the assignments are posted so if you need to be away turn in your assignments or take your test ahead of time for the online course.

REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT
In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, any student who feels that he or she may need any special assistance or accommodation because of an impairment or disabling condition should contact the ADA/ACCESS Office at (972) 273-3165 or visit Room A-430 at North Lake College. It is the policy of NLC to provide reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to contact the ADA/ACCESS Office.

DROP POLICY
Withdrawal Policy:
If you are unable to complete this course, you must withdraw from it by **Drop Date: June 27, 2012.** Withdrawing from a course is a formal procedure you must initiate. You must pick up a drop form from the Advantage Center, A-428. After the form is completed it must be returned to the admissions office, A-419. If you are withdrawing from all classes, an exit interview must be completed with a counselor in the Counseling Center, A456C. If you stop attending and do not personally withdraw by the withdrawal date, you will receive a performance grade, most likely an “F”.
*It is the student’s responsibility to withdraw, not the instructor’s.*
However, I would like to speak with each student that has decided to withdraw before they initiate the procedure. Please contact the instructor prior to withdrawal.
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**
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.

**COUNSELING SERVICES**
Counseling services for personal issues are provided to all students currently enrolled at North Lake 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 972-273-3333 or visit A 430.

**WRITING CENTER (A309)**
The Writing Center supports and supplements classroom instruction by providing focused, individualized writing instruction in response to the specific needs of the student. Its services are available to all North Lake students, not just those enrolled in English classes. The tutors are skilled writing specialists who can help students clarify writing tasks, understand instructors' requirements, develop and organize papers, explore revision options, detect grammar and punctuation errors, and properly use and document sources. Rather than merely editing or "fixing" students' papers, the Writing Center staff focuses on helping students develop and improve their writing skills.

Located in Room A309, the Writing Center is open 8:00 AM to 9:00 PM Monday through Thursday and 8:00 AM to 4:00 PM on Friday. Saturday hours are 9:00 AM to 2:00 PM during fall and spring semesters. Hours will vary during other sessions. Students who have scheduled an appointment in advance will have a tutor available to work with them at their scheduled time. Walk-ins are welcome, but they may have to wait for an opening or make an
appointment for a later time, perhaps a later day. To schedule an appointment, come by the Writing Center, call 972-273-3089, or email nlcwritingcenter@dcccd.edu.
**SCIENCE CENTER (P333)**

The Science Learning Center is available to all online students. It is located in P bldg Rm 333 just across from the Science Division Office. This room has computers, eCampus connection, and qualified tutors. All of this is free to you who have registered from the Inet Biol 1408 course. If you would like to have tutoring for specific topics, this service is free to you as well as the on campus students. I am aware that some students are not within the range of the North Lake College campus. I have added as much additional information as possible to help. If you need a specific answer or have questions, you are welcome to eMail and I will be glad to respond to your questions.

**Specific Learning Activities**

**Student Learning Outcomes**

**Biological Science 1408**

1. **Orientation.** Students are required to participate in either an online or on campus orientation session. Orientation Quiz counts 10 pts.
   Satisfies CCIC 1, 2, 5, 6  EEO 1, 3, 4, 5

2. **Textbook.** Four timed multiple choice question tests will be given covering the content of the textbook reading. Each exam counts 50 points
   Satisfies CCIC 1, 2, 5, 6  EEO 1, 3, 4, 5

3. **Laboratory.** Ten labs will coordinate with the text material. When you complete each lab, you will use a template provided and submit an INET lab Report to your instructor for grading. 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.
   Satisfies CCIC 1, 2, 3, 4, 5, 6  EEO 1, 2, 3, 4, 5

4. **Laboratory Practicals.** Two Lab Practicals worth 50 points each will be given in the testing center during the semester. The first Lab Practical will cover the content of labs 1-5 and the second Lab Practical will cover content of labs 7, 8, 9, 10. Laboratory understanding, critical thinking skills, and the ability to interpret data will be evaluated.
   Satisfies CCIC 1, 2, 3, 4, 5, 6  EEO 1, 2, 3, 4, 5

5. **Special Events.** Twice during the semester the usual text reading and laboratory procedure will be enhanced with an activity which will relate the textbook biology to the world around you. The event during these two weeks may consist of television programs, assigned movies, and other special event opportunities. Each special event will count 15 points.
   Satisfies CCIC 1, 2, 3, 4, 5,  EEO 1, 2, 3, 4, 5

6. **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.
   Satisfies CCIC 1, 2, 3, 4, 5, 6  EEO 1, 2, 3, 4, 5
7. **Final Exam.** A comprehensive, 100 question multiple choice exam covering the major objectives of the course will be given. Each question will count 1 point. Satisfies CCIC 1, 2, 5, 6 EEO 1, 3, 4, 5

8. **Late Policy.** Late work with a documented excuse will count for credit. Late work without documentation will not receive credit.

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**Exemplary Educational Objectives**

Biology 1408, as part of the Core Curriculum, satisfies the following Exemplary Educational Objectives in Communication set forth by the Texas Higher Education Coordinating Board. The objective of the study of the natural sciences component of a core curriculum is to enable the student to understand, construct and evaluate relationships in the natural sciences, and to enable the student to understand the basis for building and testing theories.

1. to understand and apply method and appropriate technology to the study of the natural sciences;
2. to recognize scientific and quantitative methods and the differences between these approaches and the other methods of inquiry and to communicate findings, analysis, and interpretation both orally and in writing;
3. to identify and recognize the differences among competing scientific theories;
4. to demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies;
5. to demonstrate knowledge of the interdependence of science and technology and their influence on and contributions to modern culture.

**Core Curriculum Intellectual Competencies**

This course reinforces 6 of the 6 Core Curriculum Intellectual Competencies defined by the Texas Higher Education Coordinating Board. The CCI’s identified by the DCCCD which are reinforced by Biology 1408 are as follows:

1. **READING:** Reading at the college level means the ability to analyze and interpret a variety of printed materials -- books, articles, and documents.
2. **WRITING:** Competency in writing is the ability to produce clear, correct, and coherent prose adapted to purpose, occasion, and audience.
3. **SPEAKING:** Competence in speaking is the ability to communicate orally in clear, coherent and persuasive language appropriate to purpose, occasion and audience.
4. **LISTENING:** Listening at the college level means the ability to analyze and interpret various forms of spoken communication.
5. **CRITICAL THINKING:** Critical thinking embraces methods of applying both qualitative and quantitative skills analytically and creatively to subject matter in order to evaluate arguments and to construct alternative strategies.
6. **COMPUTER LITERACY:** Computer literacy at the college level means the ability to use computer-based technology in communicating, solving problems, and acquiring information.
## Learning Activities, Outcomes, and Assessment

The following table provides examples on how the Course Outcomes, Educational Exemplary Objectives, and Core Curriculum Intellectual competencies are incorporated into the course.

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Learning Outcomes</th>
<th>Assessment</th>
<th>EEO’s &amp; CCIC’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Textbooks Readings</td>
<td>Mastery of content is based on reading assign pages of textbook and laboratory manual.</td>
<td>Timed, multiple choice unit tests</td>
<td>CCIC 1, 2, 5, 6 EEO 1, 3, 4, 5</td>
</tr>
<tr>
<td>2. Laboratory Reports</td>
<td>Mastery of content is based on completing lab reports, studying pictures, video clips, and/or reading of assigned pages of textbook and laboratory manual.</td>
<td>Timed, multiple choice quizzes</td>
<td>CCIC 1, 2, 3, 4, 5, 6 EEO 1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>3. Laboratory Practicals</td>
<td>Mastery of content as two (2) cumulative exams given at midterm and final. Mostly based upon lab materials.</td>
<td>Timed, multiple choice practical exams</td>
<td>CCIC 1, 2, 3, 4, 5, 6 EEO 1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>4. Major Exams</td>
<td>Mastery of content 4 exams and cumulative final. Based upon lecture materials.</td>
<td>Timed, multiple choice exams</td>
<td>CCIC 1, 2, 5, 6 EEO 1, 3, 4, 5</td>
</tr>
<tr>
<td>5. Discussion Boards</td>
<td>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.</td>
<td>A minimum of two (2) posts must be completed: 1. original thought 2. reply to another student post</td>
<td>CCIC 1, 2, 3, 4, 5, 6 EEO 1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>6. Special Events/ Biology in the News</td>
<td>Research and writing based on selected websites, television programs, movies, and other special event opportunities.</td>
<td>Grade based on rubric embedded in assignment.</td>
<td>CCIC 1, 2, 3, 4, 5, 6, EEO 1, 2, 3, 4, 5</td>
</tr>
</tbody>
</table>
Week 1

Assignment

June 6 -11
Orientation Quiz
Text Reading
Lab Templates

June 11
Lab Quizzes 1 & 2
Discussion Board 1
Test 1

Topic/Location

Online (includes info from Course Information)
Ch 1, p 2-18; Ch 2, p 20-33; Ch 3, p 34-49
Lab Templates 1 & 2 submitted
Measurement & Life Chemistry
What is Life?
Ch 1, 2, 3 (Text Reading)

Week 2

June 12 – 18
Text Reading
Lab Templates

June 18
Lab Quizzes 3, 4, & 5
Special Event 1
Test 2

Microscope - Cell, Cell Membranes, & Enzymes
Microbial Menaces
Ch 4, 5 (Text Reading)

Week 3

June 20 - 25
Text Reading
Lab Templates

June 25
Lab Quizzes 7, 8
Test 3

Ch 7, p 106-122
Ch 12, p 186-195; Ch 13, p 196-207; Ch 15, p 222-223
Cell Respiration, Nucleic Acids
Ch 7, 12, 13 ,p222-223 (Text Reading)

Week 4

June 26 – July 1
Text Reading
Lab Templates

July 1
Lab Quizzes 9, 10, 11
Discussion Board 2
Special Event 2
Test 4

Mitosis, Meiosis, Basic Genetics
Stem Cell Research
Humane Genome Project
Ch 8, 9, 10 (Text Reading)

July 2
Review and study

July 2 -3
*Lab Practical 2

Testing Center Proctored Exam - Labs 7, 8, 9, 10, 11

*Final Exam (comprehensive) Testing Center Proctored Exam - All Text Reading

BOLD DATES ARE DEADLINES – Must submit Lab Reports 24 hours before quiz deadline to receive the password.
* Lab Practical 2 and the Final Exam will be supervised in the testing center or an agreed upon proctor if you cannot come to the NLC testing center or one of the other DCCCD campus testing centers.