North Lake College
5001 N. MacArthur Blvd.
Irving, Texas 75038-3899

Dallas County Community College District

Course Syllabus
Biology 1406
Spring 2019

This course syllabus is intended as a set of guidelines for Biology 1406. 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:
Mike Huddleston
mhuddleston@dcccd.edu
972-273-3528 Office
214-354-0884 Cell
C-231
9:30am to 10:30am MW
8:00pm to 9:00pm and 4:30pm to 5:30 pm T
9:00am to 10:00am R
9:00am to 10:00am F
Other times by appointment or walk in.

Course Information
Biology for Science Majors I
Biology 1406
Section number: 73521, 73522, 73523, 73524
Credit hours: 4
Lecture Class meeting time: 5:45 PM – 8:35 PM Tuesday

Course description: An introductory survey of contemporary biology for students majoring in the sciences. Topics emphasized will include the chemical basis of life, structure and function of cells, energy transformations, and molecular biology and genetics. (3 Lecture 3 Lab.). Coordinating Board Academic Approval Number 2601015103

Required or Recommended Textbooks and Materials
**Learning Outcomes**

Learning Outcomes
Upon successful completion of LECTURE portion of this course, students will:
1. Describe the characteristics of life.
2. Explain the methods of inquiry used by scientists.
3. Identify the basic requirements of life and the properties of the major molecules needed for life.
4. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
5. Describe the structure of cell membranes and the movement of molecules across a membrane.
6. Identify the substrates, products, and important chemical pathways in metabolism.
7. Identify the principles of inheritance and solve classical genetic problems.
8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
9. Describe the unity and diversity of life and the evidence for evolution through natural selection.

Upon successful completion of LABORATORY in 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. Describe the characteristics of life.
5. Explain the methods of inquiry used by scientist.
6. Identify the basic properties of substances needed for life.
7. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
8. Describe the structure of cell membranes and the movement of molecules across a membrane.
9. Identify the substrates, products, and important chemical pathways in metabolism.
10. Identify the principles of inheritance and solve classical genetic problems.
11. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
12. Describe the unity and diversity of life and the evidence for evolution through natural selection.

**Course Outline – Corresponds to chapters in text**

1. **Introduction**
2. **Basic Chemistry**
3. **Chemistry of Water**
4. **Chemistry of Carbon**  
5. **Biomolecules**  
6. **The Cell**  
7. **Membrane Structure and Function**  
8. **Introduction to Metabolism**  
9. **Cellular Respiration**  
10. **Photosynthesis**  
11. **Cell Communications**  
12. **The Cell Cycle**  
13. **Meiosis**  
14. **Mendel’s Genetics**  
15. **Chromosomal Genetics**  
16. **DNA: Structure and Function**  
17. **From Gene to Protein**

**Means of Assessment of Course Learning Outcomes**

Learning outcomes will be assessed by examinations in both lecture and laboratory. Additionally each of the twelve units completed in lab will be assessed by either lab report, quiz or other activities determined to be appropriate by the instructor.

**Attendance Policy:**

Lecture and laboratory attendance is required. All responsibility for make-up work is that of the student. Attendance will be taken at the beginning of both lecture and lab classes. No absence is permitted from lab without penalty except in extreme circumstances. Your laboratory instructor will review lab attendance and the makeup policy at your first lab. Laboratory units cannot be completed without laboratory attendance.

**Evaluation Procedures**

**Lecture:** Your lecture is based on a combination of 6 lecture exams and 10 to 15 pre-quizzes. Quizzes may or may not be assigned and will be given at the beginning of class. If you are not there on time you cannot take the quiz. There is no makeup for missed quizzes. The lowest score for lecture exams 1-5 will be dropped from the point total for final grade determination. Each exam is valued at 100 points and each quiz at 10 points. Your lecture grade is based on a percentile of the exams and quizzes with 90-100 for an A, 80 to 89.99 for a B 70 to 79.99 for a C, 60 to 69.99 for a D and below 60 an F. Additional graded projects may be assigned during the semester, but the grade is still a percentile grade of the total possible accumulated points. Your lecture average is 70% of your total grade in Biology 1406. **If a lecture exam is missed, make up must be completed within three class days after the exam.** The makeup exam may be an essay or objective exam. The only excused absence from a lecture exam is either severe illness, bereavement or other extreme situations as determined by the instructor, but not just because you are
not ready for the exam. A second lecture exam cannot be made up except when due to extreme circumstances as approved by the instructor.

**Grading Scale**

Your final grade will be a combination of both lecture and lab, with lecture representing 70% and lab 30% of the final grade.

**Discipline/ Course/ Department/Policies**

Students are expected to be on time for all class and to fully participate in class activities. When you come to class, plan on staying until the class is dismissed. Take care of any out of class needs prior to entering the class.

Any cheating during an exam will result in you being given a zero on your exam. In this case the zero will count as one of your exam grades. It will not be dropped.

If you are helping another student on an exam (cheating) you will be being given a zero on your exam. In this case the zero will count as one of your exam grades. It will not be dropped.

Cell phones should be turned to silent and be put away during class activities. No texting or other inappropriate use of electronic devices as determined by the instructor.

Laptops, notepads, etc. can be used in class, but only for class purposes.

All electronic devices are to be turned off and put away during exams.

All students are expected to abide by the college Student Code of Conduct.

The instructor reserves the right to make changes to any part of this document as deemed necessary by the instructor for overall class success, evaluation, class policies and completion of the class.

**INSTITUTIONAL POLICIES**

Institutional Policies relating to this course can be accessed from the following link:

www.northlakecollege.edu/syllabipolicies

**COUNSELING SERVICES (A430)**

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.

**THE ACADEMIC SKILLS CENTER (A332)**

The Academic Skills Center (ASC) is designed to provide assistance to students in the following areas:

- Labs for students enrolled in foreign language, Developmental Reading, and ESOL courses. One-on-one tutoring is available.
The Writing Center 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” papers, tutors focus on helping students develop and improve their writing skills.

The Online Writing Lab (OWL) allows students to submit papers to our writing tutors electronically and get feedback within 24-72 hours. The OWL can be accessed through eCampus. After logging on to eCampus, click on the Community Tab at the top. Type “Owl” in the search field and click “Go.” Next, click on the double drop-down arrows next to “NLC-OWL2,” and then click on “Enroll.” Once enrolled, students can receive services from the OWL.

For more information or to schedule a tutoring appointment, come by A-332 or call 972-273-3089.

TESTING CENTER (A 425)
Monday-Thursday: 8:30 a.m. – 8:00 p.m.
No tests will be issued after 7:00 p.m. Other cut-off times may be in effect for specific exams by the instructor’s direction. All exams collected at 8:00 p.m.
Friday-Saturday: 8:30 a.m.-3:30 p.m.
No tests will be issued after 2:30 p.m. Other cut-off times may be in effect for specific exams by the instructor’s direction. All exams collected at 3:30 p.m.
Sunday – CLOSED

If you instructor requires you to complete an exam in the Testing Center, be sure to have the following information when you request you test:
1. Instructor’s name
2. Subject, course number, and section number (exp: Speech 1311.7011)
3. Exam number (1st, 2nd, 3rd, etc.)
4. Exam deadline (Get this information from your instructor. The testing staff cannot look up this information on computers).

You should also bring the following supplies:
1. Pencil
2. Scantron answer sheet
3. A Test Request Form must be completed before entering the Testing Center.
5. Government or school issued photo identification is required & enforced.

You may not bring personal items into the Testing Center. This includes bags, cell phones, and pagers.

Please show courteous and cooperative behavior while using the services provided by the Testing Center.
DO NOT bring children to the Testing Center. You must make arrangements for the care of your children prior to your exam date. The police department will be notified of any unattended children.

DO NOT take any testing materials with you when you leave the Testing Center. This includes the test, answers, charts, scratch paper. These items will be attached to your test.

Questions? Please visit the Testing Center (A 425) or call 972-273-3160.

Science Learning Center:
The science learning center is located in P333 and offers tutoring services in all science classes free of charge. Please take advantage of this service. Please check “Posted Hours”.

The Science Learning Center provides student services in the following subjects (majors and non majors): Biology, Botany, Microbiology, Anatomy and Physiology, Chemistry, Geology, Physics, Nutrition and Ecology. The center is located in P-333 & P-334 and offers various resources all of which are free to the students. The SLC features tutors, software, videos, CDROM’s, internet, models, places to study quietly, places for group work, and other materials to assist in science classes. In order to access resources of the SLC a North Lake College ID Card is required. The subject specific schedule of tutors is updated every semester and is located at the front of the SLC.

When students attend SLC we ask that they sign in and out. This data helps us keep the center stocked, running, and most of all, free of charge!

Hours of operation:
Spring/Fall semester: M - R 9 am to 7 pm, F & Sa 9 am – 3 pm
Maymester and Wintermester: M – R 2pm – 6 pm
Summer I & II: M – R 2 pm – 7 pm
Contact information
Center Phone: 972-273-3273
Coordinator: Amanda Turley

DROP POLICY
If you are unable to complete this course, you must officially withdraw by Wednesday, April 17, 2019. 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