This course syllabus is intended as a set of guidelines for Biology 1411. 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@dccc.edu
972-273-3528
C-231
Office Hours by Appointment

Course Information

Introductory Botany
Biology 1411
Section number: TBA
Credit hours: 4
Class meeting time: TBA

Course description: This course introduces plant form and function. Topics ranging from the cell through organs are included. Emphasis is on the vascular plants, including the taxonomy and life cycles of major plant divisions. (3 Lec., 3 Lab.)

Coordinating Board Academic Approval Number 2603015103

Course prerequisites: 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.
Required or Recommended Textbooks and Materials

Laboratory Manual: All Laboratory units are available online through eCampus.

Learning Outcomes

Learning Outcomes: Lecture
Upon successful completion of this course, students will:
1. Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.
2. Describe the characteristics of life and the basic properties of substances needed for life.
3. Identify the principles of inheritance and solve classical genetic problems.
4. Describe phylogenetic relationships and classification schemes.
5. Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
6. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
7. Describe phylogenetic relationships and classification schemes.
8. Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
9. Describe the unity and diversity of plants and the evidence for evolution through natural selection.
10. Describe different sexual and asexual life cycles noting their adaptive advantages.
11. Describe the reasoning processes applied to scientific investigations and thinking.

Learning Outcomes: Laboratory
Upon successful completion of this laboratory-based course, students will:
1. Be able to 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 investigations.
4. Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.
5. Describe the characteristics of life and the basic properties of substances needed for life.
6. Identify the principles of inheritance and solve classical genetic problems.
7. Describe phylogenetic relationships and classification schemes.
8. Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
9. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
10. Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.
11. Describe the unity and diversity of plants and the evidence for evolution through natural selection.
12. Compare different sexual and asexual life cycles noting their adaptive advantages.
13. Describe the reasoning processes applied to scientific investigations and thinking.

**Course Outline**

<table>
<thead>
<tr>
<th>1. Introduction</th>
<th>2. Cells</th>
<th>3. Plant Tissues</th>
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</thead>
<tbody>
<tr>
<td>7. Flowers, Fruit and Seed</td>
<td>8. Plant Metabolism</td>
<td>9. Genetics</td>
</tr>
<tr>
<td>16. Ferns and fern Allies</td>
<td>17. Seed Plants</td>
<td>18. Plants and Civilization</td>
</tr>
</tbody>
</table>

**Means of Assessment of Course Learning Outcomes**

Learning outcomes will be assessed by examinations in both lecture and laboratory and a plant collection.

**Evaluation Procedures**

Your grade will be determined from a combination of two lecture exams, three lab exams, a plant collection, one paper, participation and field notebook. Each individual item is valued at 100 points for a total of 1000 points for the class.

**Exams and Assignments**

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Lecture Exams (2)</td>
<td>200</td>
</tr>
<tr>
<td>Lab Exam (3)</td>
<td>300</td>
</tr>
<tr>
<td>Plant Collection</td>
<td>100</td>
</tr>
<tr>
<td>Papers</td>
<td>100</td>
</tr>
<tr>
<td>Field Work and Notebook</td>
<td>100</td>
</tr>
<tr>
<td>Participation</td>
<td>100</td>
</tr>
<tr>
<td>Other Assigned Activities</td>
<td>100</td>
</tr>
</tbody>
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**Grading Scale**

Your final grade is based on the following averages; 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 for an F.
Discipline/ Course/ Department/Policies

Students are expected to be on time for all class activities and to fully participate in class activities. Cell phones should be turned to silent and be put away during class activities. All students are expected to abide by the college Student Code of Conduct.

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.