BIOL 1011 Principles of Modern Biology Lecture

Spring 2012

Lecture: Monday 12:00PM - 01:40PM, Dickinson Hall, Room 1151
Lab: Wednesday 12:00PM - 01:40PM, Dickinson Hall, Room 5523
Instructor: Dr. Danyang Yu
Email: dyu@fdu.edu
Office: Dickinson Hall Room 4409
Office hour: M 11:00 AM - 12:00 PM
T 11:30 AM - 1:30 PM

Course Description
Basic principles of biology using evolution as the unifying theme of a study of biologically important chemicals, the structure and functions of cells and organisms and the diverse forms of plants and animals. The interactions of individuals and populations are examined so as to better understand humanity’s impact on the environment. For nonbiology majors.

Course Objectives
The objectives (goals) of this course are for non-biology majors to become familiar with:
• Scientific thinking and scientific methods
• Basic concepts of chemistry and biology
• Genetics and inheritance
• Organismic diversity and evolution through the study of anatomy and physiology
• Evolution and ecology

Text and Materials

Lecture Schedule (Topics may change with prior announcement)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Textbook Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 23</td>
<td>Basic Principles of Science</td>
<td>Pre-text. Chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>Jan 30</td>
<td>Chemistry</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>3</td>
<td>Feb 6</td>
<td>The Molecules of Cells</td>
<td>Chapter 3</td>
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<tr>
<td>4</td>
<td>Feb 13</td>
<td>Cell Anatomy &amp; Physiology</td>
<td>Chapter 4</td>
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<tr>
<td>5</td>
<td>Feb 20</td>
<td>Midterm I</td>
<td></td>
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<tr>
<td>6</td>
<td>Feb 27</td>
<td>Cell Division and meiosis</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>7</td>
<td>Mar 5</td>
<td>DNA, RNA, and molecular genetics</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>8</td>
<td>Mar 12</td>
<td>Spring recess. No class.</td>
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</tr>
<tr>
<td>Date</td>
<td>Chapter</td>
<td>Notes</td>
<td></td>
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<tr>
<td>9</td>
<td>Mar 19</td>
<td>Inheritance</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>10</td>
<td>Mar 26</td>
<td>Evolution and diversity</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>11</td>
<td>Apr 2</td>
<td>Midterm II</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Apr 9</td>
<td>Plant diversity, anatomy, and physiology</td>
<td>Chapter 17</td>
</tr>
<tr>
<td>13</td>
<td>Apr 16</td>
<td>Animal diversity</td>
<td>Chapter 18 &amp; 19</td>
</tr>
<tr>
<td>14</td>
<td>Apr 23</td>
<td>Animal anatomy and physiology</td>
<td>Chapter 20</td>
</tr>
<tr>
<td>15</td>
<td>Apr 30</td>
<td>Ecology, Post-test</td>
<td>Chapter 34</td>
</tr>
</tbody>
</table>

**Final exam. Date to be announced.**

**Evaluation**

Lecture exams: midterm I, II and final exam 70%
Lab (Refer to lab syllabus) 30%
Total 100%

**Grade**

1. You will receive a single, combined, letter grade for Principles of Modern Biology, which consists of both lecture and laboratory components.
2. Your exam point grade is based on the average of three exams (midterm I, II and final exam).
3. Final exam is **CUMULATIVE**, with 50% of the questions from week 1 to week 10’s lectures and the other 50% of questions from week 12 to week 15’s lectures.
4. Your combined point grade will be curved.
5. Your curved point grade will be converted to a letter grade using the scale below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>100-93</th>
<th>86-83</th>
<th>75-73</th>
<th>68-60</th>
<th>59-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B+</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
<tr>
<td>A-</td>
<td>92-90</td>
<td>82-79</td>
<td>72-70</td>
<td></td>
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</table>

**Rules and Policies**

1. Attendance. Students are requested to attend all lectures. Students are responsible for all materials missed due to absence.
2. Exam makeup policy:
   a. Students with **approved** excuse (approved doctor’s notice or notice from Dean of Student office) will be offered a makeup for midterm I or midterm II. Makeup exam must be taken within one week of your return to class. No credit will be given if the student fails to complete the makeup exam within one week of return to class.
   b. No makeup exam will be provided without approved excuse. You will receive a “0” for the missed exam.
   c. **No makeup will be offered for the final exam.**
**Academic Integrity Policy:**

The university policy for academic integrity must be followed by all students. Part of academic integrity policy is indicated below.

**Academic dishonesty** includes, but is not necessarily limited to, the following:

1. **Cheating**—Giving or receiving unauthorized assistance in any academic exercise or examination. Using or attempting to use any unauthorized materials, information, or study aids in an examination or academic exercise.
2. **Plagiarism**—Representing the ideas or language of others as one's own. A more complete description is listed below in the section titled “Plagiarism Described.”
3. **Falsification**—Falsifying or inventing any information, data, or citation in an academic exercise.
4. **Multiple Submission**—Submitting substantial portions of any academic exercise more than once for credit without the prior authorization and approval of the current instructor.
5. **Complicity**—Facilitating any of the above actions or performing work that another student then presents as his or her assignments.
6. **Interference**—Interfering with the ability of a student to perform his or her assignments.

**Sanctions:** Any student violating academic integrity will, for the first offense, receive one or a combination of the following penalties imposed by the faculty member:

1. **No credit (0) or Failure for the academic exercise.**
2. **Reduced grade** for the course.
3. **Failure in the course.**
4. Recommendation for **Academic Probation** to the dean of the college in which the student is registered.

The instructor shall file a notice of the penalty in the student’s file maintained in the campus Office of Enrollment Services.

In cases of interference and complicity, whether or not the student is registered in the affected course, the incident and penalty shall be recorded in the student’s file maintained in the campus Office of Enrollment Services.

For a subsequent violation of academic integrity, a student will be subject to any combination of the above sanctions, and, after due review by the academic dean according to the procedure below, one of the following:

1. **Suspension** from the University for one year. Readmission will be contingent upon the approval of the academic dean.
2. **Dismissal** from the University.
3. **Dismissal from the University** identified on the student's academic transcript as a result of a violation of the Academic Integrity Policy.