Principles of Modern Biology - Lecture

BIOL1001.21, SPRING 2010

Pre-requisites: none
Co-requisite: BIOL1011.21 Lab

Class Room and Meeting Times and Dates: Dickinson Hall Room 1151
Monday 12:00-1:40

Instructor: Dr. Janice Lee, DC
Email Address: janiceleedc03@hotmail.com, jlee5@fdu.edu

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 non-biology majors.

Text and Materials

Course Objectives
The objectives (goals) of this course are for non-biology majors to become familiar with:
- The scientific method
- Basic chemistry
- Genetics and inheritance
- Organismic diversity and evolution
- Organismic anatomy and physiology
- Evolution and ecology

Rules and Regulations
Attendance and lateness policy:
Students are responsible for all material missed due to absence and or tardiness. Since students entering a class, once the class is in session, are disruptive, and admission may be denied to frequent offenders.

Makeup and missed work policy:
- Each of the two exams will cover only the material taught since the previous exam (see the course outline).
- The final exam will be cumulative, but 50% of the exam will be on material taught after the previous exam.
- If you miss an exam and have a documented medical (or other) excuse, you will be offered a makeup exam, which must be taken within one week of your return to class.
- If you miss an exam and do not have a documented medical (or other) excuse, you will not be offered a makeup exam and will receive a “0” for the test.
Academic Integrity Policy:
Students enrolled at Fairleigh Dickinson University are expected to maintain the highest standards of academic honesty. Students have the responsibility to each other to make known the existence of academic dishonesty to their course instructor, and then, if necessary, the department chair, or the academic dean of their college. Course instructors have the added responsibility to state in advance in their syllabi any special policies and procedures concerning examinations and other academic exercises specific to their courses. Students should request this information if not distributed by the instructor.
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.
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 assignment.
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. A 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 procedures 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 University identified on the student’s academic transcript as a result of a violation of the Academic Integrity Policy.

Grades
You will receive a single, combined, letter grade for the lecture and laboratory components of this course.
- The lecture is 70% of the grade and the laboratory is 30% of the grade, i.e. your final course average is 0.7(lecture average) + 0.3(lab average)
- The lecture grade is based on the average of the three lecture exams.
- Your final course average will then be “curved”.
- Your “curved average” will then be converted to a letter grade, using the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Lecture 70%</th>
<th>Laboratory 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-92</td>
<td>C+ 78-76</td>
</tr>
<tr>
<td>A-</td>
<td>91-89</td>
<td>C  75-72</td>
</tr>
<tr>
<td>B+</td>
<td>88-86</td>
<td>C- 71-69</td>
</tr>
<tr>
<td>B</td>
<td>85-82</td>
<td>D  68-60</td>
</tr>
<tr>
<td>B-</td>
<td>81-79</td>
<td>F  59-0</td>
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</tbody>
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**Classroom Behavior:**
You and your classmates are in class to learn. Any behavior that has a negative impact on that goal is not acceptable. If your behavior habitually is deemed inappropriate, your final test average will not be eligible for the class curve at the end of the semester. This will only happen after you have been advised by the instructor.

**Teaching Methodologies/Activities**
The following will be used to assess student learning:
- Three Exams

Modes of instruction to be used by the instructor:
- Lecture and discussion

**Course Schedule (Tentative – Topics could change with prior announcement)**

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TUESDAY</th>
<th>TOPIC</th>
<th>TEXT READINGS</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 25</td>
<td>Basic Principles of Science, Pre-test</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>Feb 1</td>
<td>Chemistry</td>
<td>Chapters 2</td>
</tr>
<tr>
<td>3</td>
<td>Feb 8</td>
<td>The Molecules of Cells</td>
<td>Chapter 3</td>
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<tr>
<td>4</td>
<td>Feb 15</td>
<td>Cell Anatomy &amp; Physiology</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>5</td>
<td>Feb 22</td>
<td>Test #1</td>
<td></td>
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<tr>
<td>6</td>
<td>Mar 1</td>
<td>Cell Division and meiosis</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>7</td>
<td>Mar 8</td>
<td>DNA, RNA, and molecular genetics</td>
<td>Chapter 10</td>
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<tr>
<td>8</td>
<td>Mar 15</td>
<td>No class (Spring Recess)</td>
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<tr>
<td>9</td>
<td>Mar 22</td>
<td>Inheritance</td>
<td>Chapter 9</td>
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<tr>
<td>10</td>
<td>Mar 29</td>
<td>Evolution and diversity</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>11</td>
<td>Apr 5</td>
<td>Test #2</td>
<td></td>
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<tr>
<td>12</td>
<td>Apr 12</td>
<td>Plant diversity, anatomy, and physiology</td>
<td>Chapter 17</td>
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<tr>
<td>13</td>
<td>Apr 19</td>
<td>Animal diversity</td>
<td>Chapters 18 &amp; 19</td>
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<tr>
<td>14</td>
<td>Apr 26</td>
<td>Animal anatomy and physiology</td>
<td>Chapter 20</td>
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<tr>
<td>15</td>
<td>May 3</td>
<td>Ecology, Post-test</td>
<td>Chapter 34</td>
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<tr>
<td></td>
<td>Finals</td>
<td>Final</td>
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