BIOL 1001 Principles of Modern Biology Lab

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 Objectives
The objectives of this course are for the student:
• To learn basic laboratory techniques and approaches to study biology and chemistry.
• To learn: organismic diversity in the kingdoms of biology and organismic anatomy and physiology with a vertebrate emphasis.
These will emphasize Biology Program Objectives #1, #4, #6, #7

Teaching Methodologies/Activities
Modes of instruction that will be used:
Hands-on experiments
Demonstrations
Discussion
The following will be used to assess student learning:
Quizzes and tests, including practical tests
Development of laboratory skills
Review of lab manual
Basic scientific writing

Text and Materials
2. Required LONG White (preferably) lab coat.
   • Required in EVERY lab.
   • Missing lab coat will result in an absence for that lab.
   This will be strictly reinforced as it concerns YOUR safety.
3. Student dissection kit (for dissection labs noted in syllabus) - available from university bookstore.
4. Safety goggles in selective labs – provided. Students could purchase or bring their own goggles if they prefer. Students will be instructed in advance.

Lab Schedule (Topics may change with prior announcement)
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>LAB MANUAL EXERCISE</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 25</td>
<td>Exercise 1: Observation and Simple Statistics</td>
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<td>2</td>
<td>Feb 1</td>
<td>Exercise III: Microscopy</td>
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<td>3</td>
<td>Feb 8</td>
<td>Exercise II: Physical Aspects of Biology: Diffusion</td>
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<td>4</td>
<td>Feb 15</td>
<td>Exercise IV: Classification</td>
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<td>5</td>
<td>Feb 22</td>
<td>Exercise V: Prokaryotes</td>
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<td>6</td>
<td>Feb 29</td>
<td>Exercise VI: Protista</td>
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<td>7</td>
<td>Mar 7</td>
<td>Lab Test 1</td>
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<tr>
<td>8</td>
<td>Mar 14</td>
<td>No lab (Spring Recess)</td>
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<td>9</td>
<td>Mar 21</td>
<td>Exercise VII: Mitosis and Meiosis</td>
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<td>10</td>
<td>Mar 28</td>
<td>Exercise VIII: Animal Diversity</td>
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<td>11</td>
<td>Apr 4</td>
<td>Exercise VIII: Animal Diversity (continued)</td>
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<td>12</td>
<td>Apr 11</td>
<td>Exercise IX: Plant Diversity</td>
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<td>13</td>
<td>Apr 18</td>
<td>Exercise X: Hackensack River Ecology</td>
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<td>14</td>
<td>Apr 25</td>
<td>Documentary</td>
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<tr>
<td>15</td>
<td>May 2</td>
<td>Lab Test 2</td>
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**Grade**

Your laboratory grade accounts for 30% of your final grade for BIOL 1001 Principles of Modern Biology. Your lab grade contains the following components:

- Lab test 1 (written and practical) 30%
- Lab test 2 (written and practical) 30%
- Quizzes 15%
- Lab reports and class performance 25%

**Total** 100%

Please refer to BIOL 1011 lecture syllabus for details on lecture grade.

- **Lab test 1 and 2** will be based on materials covered in labs, assigned readings, questions discussed in lab, lab notes and assigned questions. Each test covers the exercises performed before it. Each test accounts for 30% of your lab grade.
- **Quizzes** (announced and unannounced) will cover exercises conducted in the previous week and pre-lab questions for exercises to be conducted on that day.
- **Lab reports** consist of data tables and questions for you to complete at the end of each exercise. Lab reports can be handwritten or typed. All lab reports are due **BEFORE** the beginning of the next lab session. Lab reports handed in during or after the next lab session will not be graded. These reports will help you better understand the exercises performed and prepare you for the quizzes and tests.

**Attendance and Lateness Policy**

Students are responsible for all material missed due to absence and or tardiness. Due to the unique requirements of a laboratory course, missed work cannot be made up. You are responsible for all material covered in missed labs,
regardless of the reason. Excessive absences prevent you from learning the course content and skills and will result in your grade in the laboratory course being lowered. Your class average will be lowered 10% for each unexcused absence. For quizzes and tests, you are responsible for all the material covered in class, whether or not you were present. Therefore, you should ask your classmates and instructor to go over any work you missed.

Lab is hands-on and often team-working experience. Tardiness is disruptive to lecturer and all students. Entrance to lab may be denied if you arrive late. You will NOT be allowed to take the practical exam(s) if you arrive late.

**Makeup and Missed Work Policy**

Students with approved excuse (for example, approved doctor’s notice) will be offered a makeup exam. Make up 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.

No makeup exam will be provided without approved excuse. You will receive a “0” for the missed exam.

**Laboratory safety policies**

To increase laboratory safety SONS has instituted the following policy on lab attire. It will be strictly enforced so that anyone failing to comply with these policies will be asked to leave.

- “No student will be permitted into laboratories wearing shorts, halter tops, open toed sandals, undershirts, tank tops or any other inappropriate attire”.
- “All students are to purchase a long laboratory coat which can be used for any Biology or Chemistry class which requires a lab--non-majors or majors”.
- In addition all students must wear protective safety glasses at all times when in the laboratory except if otherwise specified or during “lab lecture” as long as no laboratory activities are in progress and if sharp instruments are not being used. Safety glasses will be provided for your use. Please return them at the end of the lab session. If you observe any activity that may present danger please report it to the instructor immediately.
- **Containers with food or drink** must not be exposed or open in the lab and must not be on laboratory working surfaces.

**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.