Biology 1111L - Introductory Biology Laboratory
Course Syllabus – Spring 2014

*Individuals with disabilities who need to request accommodations should contact the Disability Services Coordinator, Student Center 214, 678-466-5445, disabilityservices@mail.clayton.edu*

Course Description:
**Number and Title:**
BIOL1111L, Introductory Biology Laboratory  
Sections CRN: 20379, 20381, 20404, 20407, 20408, 21281, 21266, 20784, & 21014

**Credit Hours:**
1.0 semester credit hours

**Catalog Description:**
Laboratory accompanying BIOL1111, Introductory Biology I

**Course Co-requisite:**
BIOL 1111, Introductory Biology I

**Note:** Due to the co-requisite nature of BIOL 1111L and BIOL 1111, if the BIOL 1111 lecture is dropped, the lab must also be dropped. Students may remain in the lecture and drop the lab, however. Any exceptions to this rule must be approved by the department chair.

**Computer Requirement:**
Each CSU student is required to have ready access throughout the semester to a notebook computer that meets faculty-approved hardware and software requirements for the student's academic program. Students will sign a statement attesting to such access. For further information on CSU's Official Notebook Computer Policy, please go to [http://itpchoice.clayton.edu/policy.htm](http://itpchoice.clayton.edu/policy.htm).

**Computer Skill Prerequisites:**
- Able to use the Windows™ operating system.
- Able to use the Microsoft Word™ word processing program.
- Able to send and receive e-mail using the Outlook™ or Outlook Express™ program.
- Able to use a Web browser (preferably Microsoft Explorer™).
- Able to print documents either on your home computer's printer or Smart Print (networked printers on campus).
Must have Acrobat Reader on computer to access lab materials. This program can be obtained for free at the following website: http://www.adobe.com/products/acrobat/readstep2.html

In-class Use of Student Notebook Computers:
You will be required to use your computer and internet service to access the laboratory manual, which is posted on the web. You will need to access the manual to obtain protocols, lab report sheets, the course syllabus, lab review pages and other important information.

STUDENT LEARNING OUTCOMES:

General education outcomes:

The following link provides the Clayton State University Core Curriculum outcomes (see Area D):

http://www.clayton.edu/Portals/5/core_curriculum_outcomes_clayton.pdf

TEACHER EDUCATION STANDARDS:
The mission of the Teacher Education Unit is to prepare professional educators who engage in reflective practice and who are competent, caring, committed, collaborative, culturally responsive, and prepared to teach diverse learners in an ever-changing society.
The content of this course syllabus correlates to education standards established by national and state education governing agencies, accrediting agencies and learned society/ professional education associations. Please refer to the course correlation matrices located at the following web site: http://www.clayton.edu/teachered/standardsoutcomes

Course Learning Outcomes:
- Upon completion of this course, students will be able to:
- Make observations and be able to describe and apply the process of science.
- Use a microscope and other tools used in biological investigations.
- Extract DNA and describe the purpose of DNA extraction to the scientific world.
- Describe biological macromolecules and the chemical compounds that comprise them.
- Conduct experiments to explore the nature of biological molecules.
- Identify a subset of microorganisms and describe components that are found in certain cells and are visible under the microscope.
- Describe osmosis and diffusion and identify variables that affect these processes.
- Describe factors that affect enzyme activity and describe how enzymes catalyze reactions.
• Conduct experiments on alcohol fermentation and describe what is required for fermentation to take place and what products are produced by the process.
• Conduct experiments on photosynthesis and explain the reactions that occur in photosynthesis.
• Model the process of mitosis and identify various stages of mitosis.
• Perform calculations such as mono- and dihybrid crossovers and predict phenotypes of offspring of two parents based on their genotype.

Instructor Information:

Dr. Christy Tower-Gilchrist (CRN 21014)
Office: Faculty Hall 130
Phone: 678-466-4700
email: ChristyTower-Gilchrist@mail.clayton.edu
Internet address: http://faculty.clayton.edu/ctowergilchrist
Office Hours: Tuesday 5:55-7:45 p.m.

Dr. Nicole Strong (CRN 20379, 21266, 20784)
Office: NBS 165
Phone: 678-466-4816
email: NicoleStron@clayton.edu
Internet address: http://faculty.clayton.edu/nstrong
Office Hours: Tuesday 12:00-2:00 p.m., Wednesday 9:00 a.m.-12:00 p.m., Thursday 12:00-2:00 p.m., or by appointment.

Dr. Joshua Parker (CRN 20408)
Office: NBS, Room 163
Phone: (678) 466-4776
email: JoshuaParker@clayton.edu
Internet address: http://www.snakedr.net
Office Hours:

Dr. Christopher Kodani (CRN 20404, 21281)
Office: NBS, Room 154
Phone: (678) 466-4782
email: ChristopherKodani@mail.clayton.edu
Internet address: http://faculty.clayton.edu/ckodani
Office Hours:

Dr. Michelle Furlong (CRN 20407)
Office: Faculty Hall, Room 128
Phone: (678) 466-4778
email: MichelleFurlong@clayton.edu
Internet address: http://faculty.clayton.edu/mfurlong
Office Hours: Tuesday 12:00-2:00 p.m., Wed. 11:00 a.m.-12:00 p.m. and 2:00 p.m.-3:00 p.m., Thursday 3:30-4:30 p.m., or by appointment.
Ms. Renee McFarlane (CRN 20381)
Office: NBS, room 158
Phone: (678) 466-4790
email: ReneeMcFarlane@clayton.edu
Internet address: http://faculty.clayton.edu/rmcfarla
Office Hours:

Class Meetings: All labs are held in the Natural and Behavioral Sciences Building in either room NBS 122 or NBS 123

<table>
<thead>
<tr>
<th>CRN</th>
<th>Day</th>
<th>Times</th>
<th>Room</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>20379</td>
<td>Tues.</td>
<td>2:20-4:10 pm</td>
<td>NBS 123</td>
<td>Strong</td>
</tr>
<tr>
<td>20381</td>
<td>Mon.</td>
<td>10:00-11:50 am</td>
<td>NBS 122</td>
<td>McFarlane</td>
</tr>
<tr>
<td>20404</td>
<td>Wed</td>
<td>10:00-11:50 am</td>
<td>NBS 123</td>
<td>Kodani</td>
</tr>
<tr>
<td>20407</td>
<td>Wed.</td>
<td>12:00-1:50 pm</td>
<td>NBS 123</td>
<td>Furlong</td>
</tr>
<tr>
<td>20408</td>
<td>Wed.</td>
<td>2:20-4:10 pm</td>
<td>NBS 123</td>
<td>Parker</td>
</tr>
<tr>
<td>21281</td>
<td>Thurs.</td>
<td>9:50-11:40 am</td>
<td>NBS 123</td>
<td>Kodani</td>
</tr>
<tr>
<td>21266</td>
<td>Thurs.</td>
<td>2:10-4:00 pm</td>
<td>NBS 123</td>
<td>Strong</td>
</tr>
<tr>
<td>20784</td>
<td>Tues.</td>
<td>5:55-7:45 pm</td>
<td>NBS 123</td>
<td>Strong</td>
</tr>
<tr>
<td>21014</td>
<td>Thurs.</td>
<td>5:55-7:45 pm</td>
<td>NBS 123</td>
<td>Tower-Gilchristy</td>
</tr>
</tbody>
</table>

Textbook Information:
No textbook is required for this course. You will be using an on-line lab manual written by CSU faculty, and can be accessed via: http://www.clayton.edu/arts-sciences/science/biology/labmanual

Recommended supplies:
It is recommended that you bring colored pencils/markers/calculators to class because a number of laboratories require you to make a graph and calculate data.

Evaluation:
<table>
<thead>
<tr>
<th>Item</th>
<th>Number of Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 lab practical examinations @ 50 points</td>
<td>100</td>
</tr>
<tr>
<td>report sheets, assignments and quizzes *</td>
<td>100</td>
</tr>
<tr>
<td>Total points</td>
<td>200</td>
</tr>
</tbody>
</table>

*The number and grading of the report sheets and quizzes will vary with your instructor. Check your specific instructor’s web page or go to your DESIRE2LEARN class to find specific instructions.

**Grading:**
Your final grade will be determined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>percentage range*</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
</tr>
<tr>
<td>B</td>
<td>80 - 89%</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79%</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69%</td>
</tr>
<tr>
<td>F</td>
<td>below 60%</td>
</tr>
</tbody>
</table>

*This reflects the percentage of the total points earned.

**Course Schedule:**
Tentative Lab Schedule-- Changes or additions to this syllabus, including reading, exam schedule, grading, and course policies can be made at the discretion of the instructor at any time.

<table>
<thead>
<tr>
<th>Week of</th>
<th>Laboratory</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 13</td>
<td>No Lab</td>
<td></td>
</tr>
<tr>
<td>Jan 20</td>
<td>Introduction to BIOL1111 laboratory Laboratory Safety- Complete safety forms in class. No Show Reporting Monday lab will not meet this week and will start on 1/27 due to the MLK holiday!</td>
<td></td>
</tr>
<tr>
<td>Feb. 3</td>
<td>Process of Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Monday class will cover the Laboratory safety along with the Process of Science Lab.</td>
<td></td>
</tr>
<tr>
<td>Feb 10</td>
<td>Biological Chemistry</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Notes</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Feb 17</td>
<td>Microscopy</td>
<td></td>
</tr>
<tr>
<td>Feb 24</td>
<td>Diffusion and Osmosis</td>
<td></td>
</tr>
<tr>
<td>March 3</td>
<td><strong>LAB PRACTICAL I</strong></td>
<td><strong>LAB PRACTICAL</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Last Day to Drop w/o Academic Penalty: Friday March 7, 2014</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Spring Break: March 10-14 No Class</strong></td>
<td></td>
</tr>
<tr>
<td>March 17</td>
<td>Factors Affecting Enzyme Activity</td>
<td></td>
</tr>
<tr>
<td>March 24</td>
<td>Alcoholic Fermentation</td>
<td></td>
</tr>
<tr>
<td>March 31</td>
<td>Photosynthesis</td>
<td></td>
</tr>
<tr>
<td>April 7</td>
<td>Mitosis (on-line)</td>
<td></td>
</tr>
<tr>
<td>April 14</td>
<td>Genetics (on-line)</td>
<td></td>
</tr>
<tr>
<td>April 21</td>
<td><strong>LAB PRACTICAL II</strong></td>
<td><strong>LAB PRACTICAL</strong></td>
</tr>
<tr>
<td></td>
<td><strong>LAST DAY OF LAB</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Mid-term Progress Report**
Due to the relatively small number of laboratory reports that will have been returned by mid-term, no mid-term grade will be reported for this course. Students making unsatisfactory progress will be contacted individually by the instructor before mid-term. PLEASE NOTE: BIOL1111 Lab course ends after Practical II.

**CLASSROOM REGULATIONS AND POLICIES:**

Students must abide by policies in the Clayton State University Student Handbook, and the Basic Undergraduate Student Responsibilities.

**Attendance is required.** Students are expected to attend and participate in every class meeting. If **three or more** labs are missed, regardless of the reason, then the student will receive a failing grade (F) for the course. This is in accordance with the College of Arts & Sciences Attendance Policy. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawals or failing grades.

Prompt attendance is required for all laboratory periods. A student arriving more than 15 minutes late for lab is considered absent from that lab.

**Students with a valid excuse may attend another lab section with permission of both instructors.** This is only available to those students who have a valid, written
excuse. The only absences that are excusable are for illness (requiring a doctor's note), accident (requiring note from the police), and legal reasons (requiring a note from the judge), and work obligations outside of the ordinary (requiring a note and contact information from your boss). The following are examples of absences that are NOT excusable: travel (including leaving for break early or coming back late) or any type of appointment (doctor, dental, eye, etc.) You know when your class meets; don't make an appointment during that time. You must bring the excuse within one week of the absence. Without a valid excuse, a grade of zero points will be assigned for the missed laboratory and quiz, if applicable. **Missed laboratories cannot be made up.** If a valid excuse is provided, the missed laboratory will not count in calculating the course grade. This means that other laboratory reports will be responsible for a greater weight in determining the course final grade.

**Lab Practicals start at the beginning of class.** Students who are more than 10 minutes late will not be allowed to begin the exam. **There are no make-up exams.** With a valid excuse you may attend another section with the permission of both instructors.

**Quizzes will be given at the beginning of class.** Students who are late must remain outside of the classroom until the quiz is finished and will receive a grade of zero. There are no make-up quizzes.

**No talking while the instructor or another student is talking.** Students repeatedly violating this policy will be asked to leave the classroom for being disruptive.

**Computers are for note-taking, research, or other class related activities only.** Students using them for surfing the internet, checking email, playing games, etc will be asked to turn them off. On subsequent offenses, the student may be asked to leave the classroom for being disruptive.

**Visitors are not permitted without the instructor's permission.** Children are not allowed in the classroom at anytime.

**No form of academic dishonesty will be tolerated in this course.** The most common forms are cheating and plagiarism, but any type of activity that is considered dishonest by reasonable standards will constitute academic dishonesty. The minimum penalty is a grade of zero on the work involved. The maximum penalty is expulsion from the university. Be aware that students found in violation of the university's academic dishonesty code have lost scholarships, athletic eligibility, and/or their U.S. student visa (if an international student). All forms of academic dishonesty will be reported to the Office of Student Affairs for investigation. Judicial procedures are described at [http://adminservices.clayton.edu/judicial/](http://adminservices.clayton.edu/judicial/).

**No form of disruptive behavior will be tolerated in this class.** While a variety of behaviors can be disruptive in a classroom setting, more serious examples include belligerent, abusive, profane, and/or threatening behavior. A student who fails to respond to reasonable faculty direction regarding classroom behavior and/or is found to
be repeatedly disruptive while participating in classroom activities may be dismissed from class. A student who is dismissed is entitled to due process and will be afforded such rights as soon as possible following dismissal. If found in violation, a student may be administratively withdrawn and may receive a grade of WF. For more information, please refer to: http://as.clayton.edu/DisruptiveClassroomBehavior.htm

**Common examples of disruptive behavior include, but are not limited to:**

- Monopolizing classroom discussions
- Failing to respect the rights of other students to express their viewpoints
- Talking when the instructors or other students are speaking
- Constant questions or interruptions which interfere with the instructor’s presentation
- Overt inattentiveness (e.g. sleeping or surfing the internet)
- Creating excessive noise
- Entering the class late or leaving the class early
- Use of cell phones or pagers in class
- Inordinate or inappropriate demands for time or attention
- Poor personal hygiene (e.g. noticeably offensive body odor)
- Refusal to comply with faculty direction

Students exhibiting these types of behaviors can expect a warning from the instructor or dismissal for the lesson in which the behavior occurs. Failure to correct such behaviors can result in dismissal from the course.

**More extreme examples of disruptive behavior include, but are not limited to:**

- Use of profanity or pejorative language
- Intoxication
- Verbal abuse of instructor or other students (e.g. taunting, badgering, intimidation)
- Harassment of instructor or other students
- Threats to harm oneself or others
- Physical violence

Students exhibiting these more extreme examples of disruptive behavior may be dismissed from the lesson or the entire course.

Students dismissed from a lesson will leave the classroom immediately or may be subject to additional penalties. Dismissed students are responsible for any course material or assignments missed.

Students dismissed from a course have the right to appeal the dismissal to the department head responsible for the course. Appeals beyond the department head may also be pursued. If no appeal is made or the appeal is unsuccessful, the student will receive a grade of WF (withdrawal – failing) regardless of the current grade in the course.

Conditions attributed to physical or psychological disabilities are not considered as a legitimate excuse for disruptive behavior.
The description of disruptive behavior and listings of examples of disruptive behavior are taken from the Web sites of James Madison University, the University of Delaware and Virginia Tech.

**Operation Study**

At Clayton State, we expect and support high motivation and academic achievement. Look for Operation Study activities and programs this semester that are designed to enhance your academic success such as study sessions, study breaks, workshops, and opportunities to earn Study Bucks (for use in the University Bookstore) and other items.

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