General Syllabus: Biological Concepts, Biology 100 Laboratory
Also Reference Lecture Syllabus

Laboratory attendance is mandatory for credit in Biology 100.

Biology Assistance Center (BAC): The BAC hours are posted in all labs, outside WG 104. You may obtain both tutorial help as well as assistance with your homework through the BAC. You are welcome to come by the BAC at any time the BAC is open.

Biology Laboratory Teaching Assistant:
Biology Laboratory Teaching Assistant Office:
Biology Laboratory Teaching Assistant Office hours:

Lab Coordinator: Mari Aanenson
Lab Coordinator Office hrs: Monday 3-4pm, Tuesday 10-11am, Wednesday 9am – 10am; Thursday 1-2pm
Lab Coordinator Office and Phone number: WG 304, 309-298-2740

COURSE POLICIES
This is a laboratory course and meets the general education requirement for the natural sciences. The lab exercises you will be conducting are integrally linked to the lecture. Being prepared includes having completed any laboratory homework requirements before the start of the lab. It also means having all your supplies with you each lab session, including your lab manual, pencil, pen, notebook paper, and any supplies recommended by your lab instructor. Since lecture and lab are integrally linked, you will find it helpful to bring your lecture notes and course text with you to lab in addition to your lab notebook.

1. Attendance Policy and Minimum Lab Grade Policy

   Tardy Policy: You are expected to be present and on time for every laboratory session. Quizzes will be given during the first ten minutes of each laboratory session. If you arrive late, you will only be allotted the amount of time remaining. For example, if you arrive five minutes late, you will be given only the remaining five minutes of quiz time to complete your quiz. If you arrive after the quiz is completed, you will NOT be permitted to take it and will receive a grade of zero for that quiz. If you arrive twenty minutes late for the lab, you are not allowed to do the lab and it will be considered an UNEXCUSED absence.

   Attendance Policy: Absences can be considered either excused or unexcused depending upon the reason for the absence. Absences will be considered excused for the following reasons: illness (your own), death in the immediate family (sibling, parent, grandparent, child, spouse), and official university trips. If you are required to be gone due to your own military service obligations, you will need to bring documentation for that to the Lab Coordinator. All other absences will be considered unexcused. The absence policy differs depending upon whether the absence is excused or unexcused.

   If you miss a lab due to an EXCUSED absence, you will not be permitted to take the quiz for the lab missed or make up the lab. However, in order not to penalize you for a legitimate absence [illness, death in the immediate family, official university trips], your total possible points will be reduced by the number of points associated with the lab exercise and lab quiz for that lab, typically eight points. In order for a lab to be considered excused, you are responsible for providing appropriate documentation within three weeks of the absence. To verify an absence due to illness, you must provide a note from your physician. If you decide not to see your physician when you are ill, your absence will be counted as an Unexcused absence. If appropriate documentation for any absence is not procured and provided to your instructor within three weeks, the absence will be considered unexcused with all the penalties as described below. Absences which are excused will be designated with an “e” on WesternOnline under the absence column for that lab.

   If you miss a lab due to an UNEXCUSED absence, you will not be permitted to take the quiz for the missed lab or to make up the lab, you will lose the 10 perfect attendance points (described below), and your total possible points will not be reduced. In other words, you will receive a grade of zero for both the lab you missed and the quiz connected with that lab as well as lose the attendance points for a total of 17 points. However, you are permitted only one (1) unexcused absence in lab before failing the entire course. If you have a second unexcused absence, you will receive a zero in lab and therefore an F in the Bio 100 course. Absences that are unexcused will be designated with a “u” on WesternOnline under the absence column for that lab.

   You are allowed only one unexcused absence and three total absences. On the second unexcused or fourth total absence (i.e. combined excused and unexcused absences) you will receive a zero in the lab and therefore an automatic F in the Bio 100 course. It is your responsibility to keep up with how many absences of each type you have.

   Online Absence Reporting System (OARS) absences require documentation to be considered for an excused absence. It is not guaranteed that an OARS reported absence will be excused.
Homework: Whether you have an excused or unexcused absence, you are expected to submit your homework (to be described at further length below) each week. Failure to submit a homework assignment will result in a zero on that assignment. Please note, homework is worth 20% of each lab’s grade.

Forced F in the Course: More than one unexcused or unauthorized absence from lab will result in a zero (0) for the lab portion of the course. More than three total absences in any combination of excused (authorized) and unexcused (unauthorized) absences will result in a zero (0) for the lab portion of the course. Students must pass the lab portion of the course (i.e. receive a 60.0% minimum score) to pass the course. Therefore, any student receiving more than one unexcused absence or a total of more than three absences (excused and unexcused absences combined) and students who receive a lab grade of less than 60.0 will automatically receive a grade of F in the course. For an absence to be authorized or excused it must be verified by the laboratory instructor. Any appeals concerning whether or not an absence is excused will be considered first by the Faculty Laboratory Coordinator (Mari Aanenson) and second by the Department Chair of Biological Sciences (Dr. Charles Lydeard). Excused absences include participation in athletic and music events sponsored by the university, approved field trips for other courses, illnesses (Beu Health Center or doctor’s note will be required for verification), and death in the immediate family (copy of the funeral service may be required for verification). Absences should be verified by the laboratory instructor prior to the lab to be missed, except for illnesses and unexpected family emergencies, which should be reported to the laboratory instructor as soon as possible upon your return to classes. Online Absence Reporting System (OARS) absences require documentation to be considered for an excused absence. It is not guaranteed that an OARS reported absence will be excused.

2. Grades

Lab Manual: Having a copy of and using the lab manual for homework and during lab is a requirement. Failure to use your own lab manual will result in a grade of zero for each homework assignment or lab report for which you are missing your lab manual. If your lab manual is lost or stolen, you will be expected to purchase a new one.

Labs, Homework, and Quizzes: The total number of points possible for lab is 150. Each lab is worth 10 points. The point allocation differs depending upon the lab. Labs 2-13 will have the following point distribution—3 points for the homework assignment for that lab, 3 points for the lab, and 4 points for the weekly quiz. Two labs, Labs 1 and 14, do not have homework assignments associated with them, therefore, those weeks the weekly quiz will be worth 7 instead of 4 points, the lab will still be worth 3 points. The quiz for each lab will be given during the next lab session for all but the last lab of the semester. Therefore, the lab quizzes will assess material mainly from the previous week’s lab; however, one or two questions may focus on the current week’s lab as well so be sure to be prepared for each lab session. In order to have a quiz over every lab, two quizzes will be given the last lab session—one at the beginning of the session over the previous week’s lab and one at the end of the session over that day’s lab. Fourteen labs will be conducted during the semester totaling 140 points.

Attendance Points: In addition, students who are present for all 14 labs will earn 10 attendance points making the total possible points for lab 150 points (Note: The attendance points are NOT bonus points but real points. They will always be included in the total possible points.). As stated above, the total possible points will ONLY be reduced IF you have an excused absence and only by the total number of points that could have been earned by submitting the lab report and taking the quiz. Homework points are never removed from the denominator, i.e. the total possible points. No extra credit is allowed for lab.

Example Grade Calculations:

<table>
<thead>
<tr>
<th>Student 1:</th>
<th>Student 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Excused Absence (-7 from possible points)</td>
<td>2 Excused Absence (-14 from possible points)</td>
</tr>
<tr>
<td>1 Unexcused Absence (possible points stay the same; loss of perfect attendance points)</td>
<td>No Unexcused Absences (retain perfect attn. points)</td>
</tr>
<tr>
<td>Total Number of Possible Points = 143</td>
<td>Total Number of Possible Points = 136</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Points Earned for Labs Overall</th>
<th>= 108</th>
<th>Points Earned for Labs</th>
<th>= 108</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfect Attendance Points</td>
<td>= 0</td>
<td>Perfect Attendance Points</td>
<td>= 10</td>
</tr>
<tr>
<td>Total Points Earned</td>
<td>= 108</td>
<td>Total Points Earned</td>
<td>= 118</td>
</tr>
<tr>
<td>Grade</td>
<td>= 108/143 = 75%</td>
<td>Grade</td>
<td>= 118/136 = 87%</td>
</tr>
</tbody>
</table>

Grading Criteria. The homework and laboratory exercise grades are determined using the following criteria.

<table>
<thead>
<tr>
<th>0 Points</th>
<th>1.5 Points</th>
<th>2 Points</th>
<th>2.5 Points</th>
<th>3 Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student completes</td>
<td>Student completes at</td>
<td>Student completes</td>
<td>Student completes 80%</td>
<td>Student completes all</td>
</tr>
<tr>
<td>0 Points</td>
<td>1.5 Points</td>
<td>2 Points</td>
<td>2.5 Points</td>
<td>3 Points</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>Student completes less than 60% of the lab assignment accurately and/or does not follow proper syntactical rules or does not turn in the homework.</td>
<td>Student completes at least 60% of the lab assignment accurately including proper use of syntactical rules.</td>
<td>Student completes at least 70% of the lab assignment accurately, including proper use of syntactical rules.</td>
<td>Student completes 80% of the lab assignment accurately including proper use of syntactical rules when completing answer that require complete sentences.</td>
<td>Student completes all parts of the homework; answers 90% or more of the questions accurately, and follows proper syntactical rules when completing answers that require complete sentences.</td>
</tr>
</tbody>
</table>

### 3. Homework Assignments

Homework will be assigned for all but two lab exercises. The homework is to be done in preparation for the next week’s lab. In order to provide your instructor time to examine your papers prior to lab and provide you feedback for the lab, assignments must be submitted to your teaching assistant at the beginning of your lab session. **No late work will be accepted.**

The homework assignments are a critical part of the laboratory. Many of your homework assignments will require that you access information on a computer. All necessary information will be accessible through the Biology Assistance Center (see below). All software necessary to complete the homework assignments is also available in the computer labs on campus and any special information needed to complete the lab homework assignments beyond that provided in the lab manual will be available via the WesternOnline.

Please note: Your homework assignments will be graded prior to lab each week. However, grades will not be placed in a gradebook until after the associated lab. This requires that you resubmit your homework with the associated lab worksheet each week. Failure to resubmit your homework will result in a grade of zero (0) being recorded in the gradebook.

### 4. Conduct

a) During lab you should always maintain a business-like attitude.

b) **Eating and drinking are strictly prohibited in lab** unless you are directed to do so by your laboratory instructor or the laboratory exercise. Any food or drinks brought into lab will be discarded to protect the health and safety of all students.

c) **Cell phones are prohibited in lab.** If you have an emergency that requires you to have your cell phone in your possession you must inform your instructor of this in advance. Possession of a cell phone in lab without explicit permission from your lab instructor that week will result in the loss of two points from that week’s lab grade.

d) During the laboratory you will be using various types of equipment. You are responsible for properly using that equipment. If you are unsure how to use a piece of equipment, be sure to ask your lab instructor!!! If the equipment is damaged in any way, be sure to notify your instructor immediately. Otherwise you could be held responsible for the damage.

e) You will occasionally be using stains and other chemicals that could damage clothing, therefore, you may **not** want to wear your best clothes to lab.

f) Common means by which students cut themselves in lab are careless use of a razor blade or scalpel or picking up broken glass. Use caution when participating in any of these activities. Request the assistance of the instructor when cleaning up broken glass.

g) At the end of each laboratory session, you are expected to clean your laboratory station, replace all materials to their original locations, submit your completed laboratory report, and check out with your laboratory instructor. Failure to do any of these may result in a lowered laboratory grade.

h) **Closed toed shoes will be worn each and every laboratory period for the entire laboratory period.**

i) **Long pants will be worn each and every laboratory period for the entire laboratory period.** Exceptions will be made for cultural reasons on an individual basis.
5. **Biology Assistance Center**

The Department of Biological Sciences maintains an assistance center to assist students enrolled in the introductory biology courses. This assistance can vary from tutoring help to help with homework assignments to preparation for exams. The Center is located in WG 104. Hours are posted each semester in your lab room, outside the assistance center, and in your classroom. NOTE: BAC hours are on Mondays, Wednesdays, and Fridays. They are NOT held on Tuesdays and Thursdays because the lab room is being used for labs on those days of the week. Please do not interrupt labs in session to obtain assistance or to attend to your homework assignments.

**Policies for use of the Biology Assistance Center (BAC)**

All individuals using this lab are expected to follow the policies listed below. Failure to do so may result in expulsion from the BAC.

1. The computers in these rooms are for use with activities related to the freshman biology lectures and labs only. Any other use of the computers is not acceptable.
2. Lab homework assignments must be submitted to the TA on duty in the BAC when complete. The TA on duty, and only this person, will place the completed work in the appropriate Instructors file.
3. Be courteous of others in the lab. Please no loud talking, talking on cell phones, or participating in activities that may disturb others working around you.
4. As with all labs – **NO FOOD OR DRINK IS PERMITTED IN THE BAC or ANY LAB ROOM!!!**

6. **Academic Honesty**

Due to the nature of the laboratory setting, most of your in-class work, except for quizzes, will be completed as a group or at least in pairs. All group members are expected to contribute equally to all parts of the lab. A group member who does not participate as an equal member may have his/her grade lowered. The homework assignments and quizzes are to be performed as an individual effort, meaning that you are to do your own work. If you have questions about how to complete an in-class or homework assignment, you may seek the assistance of a peer, partner, tutor, or instructor, but ultimately you are responsible for understanding the information and completing the work yourself. Remember, any work you sign your name to will be considered your original work unless you specify otherwise. Failure to properly cite a source that you used to assist you in completing your work is considered a form of plagiarism, including failure to cite your textbook, a web site, a peer or tutor, etc.

**University Policies:**

- Students Rights and Responsibilities: [http://www.wiu.edu/provost/student/](http://www.wiu.edu/provost/student/)
- Grade Appeal Policy: [http://www.wiu.edu/policies/gradeappeal.shtml](http://www.wiu.edu/policies/gradeappeal.shtml)
- WesternOnline (need ECOM username and password for entry): [http://westernonline.wiu.edu](http://westernonline.wiu.edu)

**ADA REQUIREMENTS:** In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. For the instructor to provide the proper accommodation(s) you must obtain documentation of the need for an accommodation through Disability Support Services and provide it to the instructor. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she is not legally permitted to inquire about such particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Support Services at 298-2512 for additional services.

**Syllabus Agreement Form:** Now that you have read the syllabus, make sure to get any questions you might have regarding its contents answered, and finally complete and submit the syllabus agreement form located at the bottom of the form you received in lab. This form must be submitted by the beginning of the third lab or you will not be allowed to participate in the lab. Any absences resulting from failure to submit the form will be considered an unexcused absence with all associated penalties.

**Biology 100 Laboratory Schedule**

Labs begin the second week of the term

**Week 1:** Lab 1; Scientific Method Lab
Week 2: Lab 2; Organic Molecules
Week 3: Lab 3; Introduction to Laboratory Tools: Microscope, Metrics, and Computers
Week 4: Lab 4; Reproduction and Development
Week 5: Lab 5; Cell Structure and Function
Week 6: Lab 6; Cell Division
Week 7: Lab 7; Monohybrid Cross in Corn
Week 8: Lab 8; Genetic Problem Simulations
Week 9: Lab 9; Hereditary Differences in Humans: DNA Fingerprinting
Week 10: Lab 10; Ecology and Population Growth: Part I
Week 11: Lab 11; An Antipodal Mystery
Week 12: Lab 12; Ecology and Population Growth: Part II
Week 13: Lab 13 and Lab 14; Migration Ecology and Population Growth: Part III
Week 14: Lab 15; Animal Behavior
Welcome to Biology 100 Laboratory. We hope that you will enjoy this lab and have a good semester. There are several policies that you must be aware of to do well in this course.

The full syllabus including all course policies, required lab manual, lab topic sequence etc. is on WesternOnline. To access WesternOnline go to the following web site: https://westernonline.wiu.edu Login using your WIU ECOM ID and password. If you have not already done so, you will need to activate your WIU user account. To activate your account, open the WIU home page (http://www.wiu.edu), select Webmail/Zimbra, then select “GUAVA account activation” and follow the directions. If you have difficulty activating your account, go to one of the campus computer labs and ask for assistance, or call the University Computer Support Services Helpdesk at 309-298-2704. Your account must be activated and you must be officially registered in order to access the WesternOnline account for this lab. If you still cannot access the WesternOnline site for this lab, let your instructor know - providing your name, lab and lecture section numbers, and user-id. This should be done as soon as possible so you do not lose points for homework, etc. It is YOUR responsibility to make sure you have access. Failure to do so may result in loss of points in lab.

Check your grades on WesternOnline regularly. You should keep all your lab work papers until your grade is finalized. If there is a grade dispute, you must provide your instructor with your graded quiz, lab exercise worksheet, or homework, in order for your grade to be changed.

Forced F Policy:
Any student absent for more than one unexcused or a total of more than three absences (excused and unexcused combined) from lab in the semester will receive an F in the course regardless of your points in lecture. Any student receiving a grade of less than 60.0 in the lab for any reason (including lab absences) will receive an automatic F in the entire course - lecture and lab combined, regardless of your points in lecture. Absences will be designated as "e" for excused or "u" for unexcused on the “Grades” section of the Lab WesternOnline site.

Tardy policy: If you are more than 20 minutes late for the lab, it will be marked as an Unexcused absence.

Syllabus Agreement Form: Complete and submit the syllabus agreement form located below by the beginning of the third lab or you will not be allowed to participate in the lab. Any absences resulting from failure to submit the form will be considered an unexcused absence with all associated penalties.

********************************************************************************
Syllabus Agreement Form
I have read, understand, and agree to abide by the policies set forth in the syllabus.

Student Name (Please Print)          Student Signature

Dated: ______________________________