# COURSE INFORMATION PRINCIPLES OF BIOLOGY II (BIOL 1108L)

BIOL 1108L is a required component of BIOL 1108, a course in organismal biology for science majors. An introduction to Earth's biodiversity will be presented in the context of habitats (lakes and forests) in order to identify adaptations to those environments and to study interactions among organisms. The approach will be inquiry-based, will feature cooperative learning, and will use the scientific process and writing to encourage critical thinking skills. As a result, labs do not run parallel to lecture but complement the lecture portion by emphasizing slightly different aspects of the overall course material. Please read the Introductory Material in your Lab Manual before the first lab. The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

BIOL 1108L is a Writing Intensive Lab Course. It closely follows the guidelines established by The University of Georgia's Writing Intensive Program (WIP). Our goal in following these guidelines is to help you become better writers in your academic field of science, as writing and thinking are parallel cognitive (learning) processes. Research has shown/it is now well known that writing engages individuals in the information being studied and therefore results in better learning and retention of the subject material.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

#### INSTRUCTORS:

Graduate Laboratory Assistant (GLA): GLA names, specific teaching assignments, and email addresses will be posted outside of room 403A and on the 1108L eLC page

(<u>https://www.elc.uga.edu/webct/entryPageIns.dowebct</u>). Students are strongly encouraged to take advantage of the opportunity to discuss course material directly with their GLA during office hours.

# LAB PROGRAM COORDINATOR:

Dr. Kris Miller

Office: Room 402, Biological Sciences Building Office Hours: By appointment – email or call

Phone: (706) 542-1681 E-Mail: *krmiller@.uga.edu* 

#### DATA COLLECTION SPECIALIST:

Mrs. Davis

Office: Room 403A, Biological Sciences Building

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Please see Mrs. Davis with concerns regarding enrollment, taking or removing an Incomplete (I), and any other administrative issues.

# BIOSCIENCE LEARNING CENTER:

The Bioscience Learning Center (BLC) is located in room 406 of the Biological Sciences Building. This facility houses computers (both MAC and PC) for use by students enrolled in courses at UGA. All BLC computers are Internet connected. The BLC charges a small fee for printing ( $6\phi$  per page) and photocopying ( $11\phi$  per page) and only accepts Bulldog Bucks for payment. Desk copies of the lab manual, corresponding lecture course text, and photo atlases are on reserve in the BLC for student use. BLC hours are from 8:30 AM – 7:00 PM, Monday through Thursday; 8:30 AM – 5:00 PM, Friday. The BLC is closed on weekends.

# MATERIALS FOR LAB CLASSES:

- 1. Lab Manual You may purchase your lab manual, "BIOL 1108L/2018L Principles of Biology II Laboratory Manual" from the University Bookstore, Beat the Bookstore, or Off Campus Bookstore. Bring to lab each week.
- 2. Journal You may purchase your lab journal, "BIOL 1108L/2018L Laboratory Manual" from the University Bookstore, Beat the Bookstore, or Off Campus Bookstore. Bring to lab each week.
- Lab Coats are optional, but recommended. The dress code is given in the Lab Manual, page 4.\*

\*Failure to comply with the dress code will result in dismissal from lab and will be marked as an excused absence. You will be given one week to complete a make-up assignment. If the work is not completed in that time, you will have 20 points deducted from your lab point total.

#### eLC:

eLC is a web-based course management system used for BIOL 1108L. You will need to use your MyID and password to access eLC. Once you log in, choose BIOL 1108L from your courses listed to access information about this laboratory course (e.g., course syllabus).

#### ATTENDANCE:

\*Students who miss <u>three</u> labs at any point in the semester (this includes any combination of excused or unexcused absences), will not be given credit (i.e., will receive 0 points) for the 1108 Lab.

Attendance is required for this class. Missing even one class means that you have missed a significant portion of the course. DO NOT schedule any other appointments or activities during the time that you are scheduled to be in lab.

Missing labs with a valid excuse: A "valid" excuse is one that is written, verifiable, and covers the date and time of your scheduled lab class. Oversleeping and job conflicts do not constitute acceptable excuses. Missing a lab with a valid excuse allows you to make-up the lab provided that you contact your lab instructor within 48 hours of the absence. If you know in advance that you will miss a lab with a valid excuse, contact your GLA before the lab for reassignment to another lab period. Make-up assignments are due within a time limit agreed to between you and your GLA and may include any or all of the following: evidence that you have consulted with your team members regarding missed work and data, completing the lab with a different section, submitting assignments associated with the missed lab, making up a lab assessment and/or by completing an alternate assignment designated by the GLA or course instructor. Students who fail to complete the make-up work within the allocated time will not receive credit for the lab exercise. You are responsible for all material and data presented and gathered in lab.

**Missing labs without a valid excuse:** If you do not have a valid excuse for missing a lab, you will not be allowed to make up any work and will automatically receive a **minimum** of 20-point deduction from your total lab points; if a lab is worth more than 20 points for that day, you will lose the total number of points for that day

Tardiness and leaving lab early without permission are not tolerated in lab. If you arrive to lab more than 15 minutes late you will be marked as absent with a valid excuse but will be allowed to hand in work for that lab as well as stay and complete the lab. If you leave lab early without permission, you will be marked as absent without a valid excuse and will automatically receive a 20-point deduction from your total lab points for that day.

Assignments are due on the days indicated on your syllabus. Each day that an assignment is late, you will lose 20% of the assignment's total points. **Note: there are certain assignments where late assignments will not be accepted at all.** 

If a student has missed three or more labs due to extenuating circumstances with valid documentation and wishes to avoid a failing grade, s/he should request an Incomplete from her/his **lecture** 

instructor. Please note that any missed lab for a valid excuse will still be marked as an excused absence, even if you make up the lab in another lab section.

#### PREPARATION:

It is imperative that you prepare thoroughly for each and every lab. Preparation, or lack thereof, not only affects your grade in the course, but also impacts your team members. You cannot be an effective team member if you only have a vague idea of what's going on. Preparation means reading and understanding the lab exercise, completing any pre-lab assignments, thinking about the challenges for that lab, developing ideas to share with your fellow students, communicating as necessary before lab with your team members, and studying any lecture, textbook and online material relevant to lab.

# COMPLETION OF LAB EXERCISES:

Labs are scheduled to run for two consecutive class periods (1 hour and 55 minutes). You will need the scheduled time to adequately complete the lab exercise. You are expected to participate fully and to complete all the challenges and assignments in each lab exercise.

#### LABORATORY JOURNALS

You will be extensively using your Laboratory Journal (sold with the Lab Manual) during most lab periods to record ideas, observations, questions, data, and to complete journal assignments.

# WRITTEN ASSIGNMENTS:

Every lab exercise ends with a writing assignment labeled 'The Next Step.' In some cases it will be written individually, and in other cases it will be written with your team members. You will also have at least two written pre-lab exercises. Your GLA will provide additional information regarding assessment of these assignments.

#### **EXAMINATIONS:**

In contrast to weekly quizzes given in most lab courses, this course will only have two examinations (called Laboratory Assessments), one at the conclusion of each major section of the course. You will be able to use your Laboratory Journal during these examinations. Students who need special testing circumstances should make their GLA aware of their needs by submitting the appropriate documentation during the first two weeks of class. Your GLA will provide additional information regarding expectations for the exams.

#### **GRADES:**

Total points assigned in the following categories are given below. More detailed point assignments are given in the Lab Outline.

Pre-lab Assignments/The Next Step Assignments/Journals	165 points
Lab Assessments	100 points
Student presentations	30 points
Peer/GLA evaluation	35 points

Total 330 points

There will be no extra credit or bonus points given in this lab course. Historically, students who attend their lab classes, prepare for lab on a weekly basis, and turn in all of their written work on time, earn good grades for their efforts.

You should keep a record of all your lab grades and save your graded papers until the end of the semester. ANY COMPLAINT ABOUT A GRADE MUST BE BROUGHT TO YOUR GLA'S ATTENTION, IN WRITTEN FORM WITH A THOROUGH EXPLANATION AS TO WHY YOU DISAGREE WITH THE GRADE, WITHIN ONE WEEK OF THE GRADE BEING POSTED. Under no circumstance will a grade be changed after the last day of classes.

# **GROUP DYNAMICS:**

You will be working in groups throughout the semester, and some weeks will require you to submit work, for a grade, as a group. If you are experiencing problems with one or more group members, please inform your GLA so that s/he may take this into consideration when they evaluate each student at the end of the semester.

#### ACADEMIC HONESTY:

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: http://www.uga.edu/honesty/. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

# GROUP WORK:

Many of your laboratory experiences in BIOL 1108L will be based upon work completed in small groups. We encourage you to interact with your GLA and your classmates when completing your in-class work and your homework. However, you are expected to complete all written assignments by yourself (i.e. showing independent thought and voice) unless otherwise directed by your GLA.

In the sciences, all co-authors on papers are held accountable for the accuracy and originality of the published work. Similarly, in lab assignments, when a student's name is on a group project, this implies that s/he takes responsibility for the accuracy and originality of the *entire* assignment (and also for any academic dishonesty that may have been involved).

Students often have difficulties determining how to demonstrate independent effort when they turn in a group assignment (i.e. "We all did the same thing so shouldn't the work that we turn in be the same?"). Please carefully read *Expectations about Group Work & Plagiarism*, located on eLC, under the link "Plagiarism." You are responsible for being familiar with this document. If you ever have a question about whether or not you have crossed the fine line between group work and independent work, ask your GLA for assistance before you hand in an assignment.

Deviations to the course syllabus, assignments, and associated rubrics are likely to occur. Please be certain that you have obtained information about all assignments due for this lab course. If you have questions about any assignments, ask your GLA.

# Lab Outline and Summary of Point Values BIOL 1108L – Fall 2011

Week of:	Lab Topic	Points	Assignments Due 72 Hours After Lab	Due 48 hours Before Next lab	Assignments Due in Lab
Aug. 15	Section 1, Lab 1: Aquatic Organismal Diversity I	5	Week 1 Question (WK1Q, 5 points)		
Aug. 22	Section 1, Lab 2: Aquatic Organismal Diversity II and Asking Scientific Questions				■ JN on Week 1 Question and Explanation
Aug. 29	Section 1, Lab 3: Terrestrial Organismal Diversity I	10			<ul> <li>JN on Week 2 Question and Explanation</li> <li>JN on GLA-assigned article</li> <li>Week 2 Question (WK2Q, 10 points)</li> </ul>
Sept. 5	Section 1, Lab 4: Terrestrial Organismal Diversity II and Design of Scientific Investigations	10			<ul> <li>Peer review two classmates' WK-2-Qs: individual effort (PR-WK2Q, 10 points)</li> </ul>
Sept. 12	Section 1, Lab 5: Lab Assessment I (LA1, 50 points) and Student-Designed Experiment Equipment	55		Investigating a Lake Ecosystem Pre-Lab (PL1, 5 points)	
Sept. 19	Section 2, Lab 1: FIELD TRIP Class Investigation of a Lake Ecosystem		Group recorders submit field data to GLA		<ul> <li>Research Proposal, One of Two: group effort (meet with GLA for feedback)*</li> <li>*Student designed experiment equipment list due with Research Proposal draft</li> </ul>
Sept. 26	Section 2, Lab 2: Class Investigation of a Lake Ecosystem	10			<ul> <li>Peer review of one team proposal: individual effort (PR, 10 points)</li> <li>GLA Evaluation 1 (midterm feedback)</li> </ul>

Oct. 3	Section 3, Lab 1: Student Experiments, Part I	40				Research Proposal, Two of Two: group effort (PROP-G, 35 points)
						Group Work Feedback 1 (GWF1, 5 points)
Oct. 12	Section 3, Lab 2: Student Experiments, Part II	5			•	Planning your research article (SW, 5 points)
Oct. 17	Section 2, Lab 3: FIELD TRIP Class Investigation of a Forest Ecosystem	10	Group recorders submit field data to GLA	Investigating a Forest Ecosystem Pre-Lab (PL2, 5 points)		
Oct. 24	Section 2, Lab 4: Class Investigation of a Forest Ecosystem					<ul> <li>Research article, One of Two: individual effort (may need to meet with GLA for feedback)</li> <li>Graphing exercise (G, 5 points)</li> </ul>
Oct. 31	In-class conferencing on research articles	50				
Nov. 8	Section 2, Lab 5: Lab Assessment 2 (LA2, 50 points) and PowerPoint Presentation Preparation					Research article, Two of Three: individual effort (may need to meet with GLA for feedback)
Nov. 15	Section 3, Lab 3: Student Experiment Presentations	35				<ul> <li>PowerPoint Presentation (PRES, 30 points)</li> <li>Group Work Feedback 2 (GWF2, 5 points)</li> </ul>
Nov. 22	Thanksgiving Break					■ NO LABS THIS WEEK
Nov. 29	Labs Do Not Meet This Week - Final Research Article Due by Your Normal Lab Day and Time to your GLA by his/her preferred means	100				<ul> <li>Research article, Three of Three: individual effort (RA-IND, 75 points)</li> <li>GLA Evaluation 2 (GLAEVAL2, 25 points)</li> </ul>
Nov. 29	Classes end Tues Dec 6th – Follow Friday class schedule					