BIOL 2108H – Honors Organismal Biology
Spring 2011 Course Syllabus

Welcome to BIOL 2108H! I would like to invite you to a feast! What will we be feasting on?

- Enticing information about the scientific endeavor to whet our appetites for more.
- Stimulating opportunities to use our minds to pick apart and solve problems in biology, and
- Juicy biological concepts that will make our tastebuds tingle.

Are you hungry?

I sure hope so, because I've been working hard and will continue to work hard throughout the semester to blend my knowledge of biology and how people learn with my passion for teaching in order to prepare a course that you can't resist. If you decide you want to stick around for the party, I ask that you prepare for the feast, dig in, and enjoy!

The following pages contain crucial details about what you can expect from me – your chef (oops, I mean professor), how you will need to prepare, a description of the course, and how you and I will figure out if this shindig was really all I intended it to be! So . . . if you choose to join me, keep reading!

Who are the course personnel?

My name is **Dr. Paula P. Lemons**, and I am the lead professor for this course. If you need to get in touch with me: **Office: 405 Biological Sciences Building; Email: plemons@uga.edu; Phone: 542-3340. I am available to meet with you by appointment.** I generally check course email one time per day, so you can expect a response to your emails within 24-48 hours.

As your professor you can expect me to:

- Be well-prepared, organized, and fair.
- Focus on fundamental concepts of biology, using the details of biology to provide evidence for and illustrate the fundamental concepts we cover.
- Help you improve your ability to think critically and solve biological problems.
- Encourage us to keep our eyes wide open to the world around us – biology is everywhere and it matters in ways that we haven't even thought of!
- Be accessible as a guide and facilitator of your learning.

Other important course personnel include:

- **Andrew Binderup, Lecture and Lab Teaching Assistant (TA)**, binderup@uga.edu.
- **Peter Baas, Graduate Laboratory Assistant (GLA)**, pbaas@uga.edu.
- **Kris Miller, Lab Program Coordinator**, Office: Room 402 Biological Sciences Building, E-Mail: *krmiller@.uga.edu*, Phone: 542-1681.

What will you learn in BIOL 2108H?

BIOL 2108H is a unique opportunity for both you and me. BIOL 2108H gives me a chance to teach in a smaller class setting and to teach a class full of motivated, intelligent, and accomplished students. I always look forward to BIOL 2108H! Based on what former BIOL 2108H students have told me, BIOL 2108H provides you a chance for a different classroom experience, focused less on memorization and more on problem-solving, focused less on competition and more on collaboration, focused less on passivity and more on action.

Given this unique setting, here are my goals for your learning:

1. Increase your enthusiasm for viewing the world "through biology."
2. Become "enculturated" to science.
3. Remember and understand key areas of content in evolution, organismal diversity, animal physiology, and ecology that will assist your performance in upper level courses, preparation for graduate and professional exams, and more generally provide you with a solid foundation for continuation of study in biology.
4. Demonstrate thinking skills that are frequently used to answer questions about biology, including applying your knowledge to problems that are new to you, seeing patterns and organization in new problems, and determining the quality of different pieces of information.
5. Experience learning in surprising and meaningful ways!

How will I measure your learning?

I want to know if you meet the learning goals stated above, so I've come up with some ways to measure some of the goals. The most measurable goals are numbers 3 and 4. Numbers 1, 2, and 5 possibly could be quantified, but instead, I look for the accomplishment of these goals in the things you write in your evaluations and what you say to me about the course, including after the course is over and years have passed. To measure numbers 3 and 4, we will have a variety of assignments, some worth few points, some worth a lot of points, some in groups, and some individual. Those assignments are described in the table and text that follows.

Assignments (I=Individual; G=Group)	Total Points	Approximate % of overall grade
Top Inventor Entry (G)	20	3
Case Study: Mildred Using Plants (3-part assignment)	25	4
Case Study: Investigative Macroevolution (G)	20	3
Case Study: Bad Fish (G)	20	3
Case Study: Ecology (G)	20	3
Top Inventor Events (?)	60	10
Paper Discussion Questions (I)	25	4
Exam Preparation Quiz (I)	20	3
Exam 1 (I)	100	16
Exam 2 (I)	100	16
Final Exam (I)	150	24
Field trip participation (I)	25	4
Preparation and participation (including clickers and miscellaneous class work) (I)	45	7
Total points	630	100

Assignment Descriptions:

- **Top Inventor Entry** – Your first assignment for the course will be an entry into the Top BIOL 2108H Inventor contest. Details will be distributed on the second day of class.
- **Case Studies –** Some days lecture time will be used for real-world case studies completed in small groups. Each case study will include a group assignment worth the amount of points designated in the chart.
- **Top BIOL 2108H Inventor Events** – On the second day of class you will receive your Top BIOL 2108H Inventor contest assignment. You will work in groups to create your event entry. The top two entries selected will actually be used in class this semester and taught by the winners. The assignments associated with both of the top two entries will be worth 30 points each for a total of 60 points for the semester.
- **Paper Discussion Questions –** Late in the semester, I will provide you with a recent and exciting paper or group of papers pertinent to the topics we are considering in class. Prior to class, you will be asked to read the paper(s) and complete a questionnaire that measures your understanding and critical analysis of the paper. The questionnaire will be worth 25 points.
- **Exam Preparation Quiz** – In an effort to give you a lower stakes way to see what my exams are like, I will give you a 20-point in-class quiz a couple weeks before Exam 1. The quiz will match the format of Exams 1, 2 and the Final but will be much shorter. It will be graded in time for you to adjust your study strategies, if needed, for Exam 1.
- **Exams and Final Exam –** Two times during the semester I will give you an exam in class that will take the entire class period. The exams will primarily consist of questions that ask you to use your biological knowledge, e.g., by applying, analyzing, evaluating, or synthesizing. The dates for the midterm exams are included on the course schedule, and each one will be worth 100 points of your final grade. The Final Exam will follow the same format as the in-semester exams, will be cumulative, and will be worth 150 points of your final grade.
- **Field Trip Participation** – We will take a class field trip this semester. The field trip was a highlight of the Spring 2010 BIOL 2108H class. Stay tuned for details. For your participation in the field trip, you will receive 25 points.
- **Preparation and Participation** – In order to accomplish the goals of this course, it is essential that you prepare and participate. I reserve 45 points of your grade to award your contributions to the course as measured by your attendance and other things like asking and responding to questions in class and working well with your peers. Two of the ways I will measure your preparation and participation are through:
    - **Clickers** – Do NOT buy a clicker. Our class will be pilot testing a new clicker system for the University. I will issue you a clicker in class. You must return the clicker at the end of the semester to get your clicker points.
    - **Miscellaneous class work** – Throughout the semester I will have "pop" assignments. The effort and quality of your work on these assignments will contribute to your preparation and participation score.

Calculation of letter grades – Your letter grade for the course will be calculated at the end of the semester and will be based on your final percentage. Your final percentage will be determined by adding the total number of points you have earned in lecture (out of 630 points) and lab (described in your lab syllabus), dividing it by the total number of points you could have earned, and multiplying by 100. I will use the following scale for determining letter grades: 100-93% A; 92-90% A-; 89-87% B+; 86-83% B; 82-80% B-; 79-77% C+:76-73% C: 72-70% C-; 69-60% D; <60% F. However, I reserve the right to alter this scale, in your favor, if the mean percentage for the course is lower than 80%, by setting the B-/C+ cutoff at the course mean.

What will we do in this class?

- Lecture, Tues/Thurs, 12:30-1:45 PM, Biological Sciences Room 404A.

  Lecture will consist of a variety of activities, including traditional lectures, discussion, case studies,

- Lab, held in two sections, Room 329 Biological Sciences.

  In lab, biodiversity (e.g., the variety of living organisms) will be presented in the context of habitats in order to identify adaptations to those environments and to study interactions among organisms. The approach will be inquiry-based, writing-intensive, will feature cooperative learning, and will use the scientific process to encourage critical-thinking skills.

  You will receive a separate syllabus and lab schedule at your first lab session. ***Please read the Introductory Material in your Lab Manual before the first lab.***

- Field trip – In order to expose you to a habitat not explored in lab and to provide you additional hands-on opportunities with organismal biology, we will go on a field trip. **You are required to participate in the field trip opportunity.** Dates and details are still in progress. Stay tuned.

Attendance

I expect you to attend all lectures and labs, and to arrive on time. Lecture attendance will be monitored via a sign-in sheet. I do allow you two absences from class without any explanation. Missing class more than 2 times without a valid excuse will result in a lower preparation and participation score.

How will you need to prepare for this course?

Aside from an attitude of interest and enthusiasm, here are some additional ways you can prepare:

Come to class – I expect you to attend lecture and lab. Simply showing up is one of the most important things you can do in this course. We will talk about things in class and lab that you will not be able to access from the textbook. Lecture attendance will be monitored using ***clickers (do not buy a clicker. We are pilot testing a new system for the University, and I will issue a clicker to you).***

Use the Lecture Outlines – You will be tested on what we cover in lecture. ***If it's not in the lecture, it won't be on the test.*** That means you need a good set of notes. ***I will provide Lecture Outlines for each class with Learning Objectives and key powerpoint figures*** (e.g., diagrams and text that I don't want you to waste your time copying). ***Your job is to add notes to the outline based on what we do in class*** and to use these notes to develop a study guide for exams. I will post the Lecture Outline to elc by 5 PM the day before each lecture.

Visit elc regularly - Class information is available on-line through elc under BIOL2108H - PRIN BIOL II HON. Use your myID name and password to login. You should check the website frequently, as it is used for announcements, exam information, and as a resource for class and studying.

Work with groups of your peers – Most class periods you will have an opportunity to work with one or more of your classmates to answer questions about the material. Several times in the semester you will also work with a group of your peers on case studies or paper discussions. I strongly encourage you to also work with your classmates outside of class in study groups and to share lecture notes and study guides with each other.

Participate while you're in class – Participating helps you stay focused on the subject and exposes the areas you understand well and areas where you need to improve. I do my best to provide good opportunities for you to respond to and ask question in class. Lab also will require a high level of participation. In general, your success in the course will improve when you question the material aloud or to yourself.

Study outside of class – You will need to invest time outside of class, focusing on the "big picture," understanding the details and examples that support the "big picture," and practicing your thinking and problem-solving skills. I can't say for sure how much time you'll need, but consider 4-5 hours per week a good starting point.

Read – Course reading materials provide you with a source of information that complements what we cover in class. They include:

- **The course textbook, *Biology 8th edition by Campbell, Reece, and co-authors***. A reading list is provided separately.
- **The laboratory manual, BIOL 1108L Lab Manual, 5th ed. (including the Laboratory Journal).**
- Other readings may be provided on eLC or in class when I want you to have more background than is provided in the textbook. Please stay tuned for this information.

Is there anything else?

Class etiquette - Please be on time for class and switch your cell phone off. Please do not talk to each other during class, unless I ask you to. If you have any class-related questions ask me at any time: I will be happy to clarify. Please do not leave class early (this is very disruptive), and treat each other with respect. Please keep the lecture hall clean; use the trashcans and recycling bins outside the lecture hall.

Missed Assignments - If you miss an assignment due to illness, authorized representation of the University, or extraordinary personal circumstances, you must notify me as soon as possible. For excused absences from an exam, make-up exams generally will not be given; rather the score on a missed exam will be based on the prorated scores of other components of the course. Unexcused absences will receive a score of zero.

More generally, requests for extensions on any assignment due to illness, authorized representation of the University, or extraordinary personal circumstances must be requested in advance of the deadline or as soon as possible. Unexcused late submissions of assignments are not acceptable and will result in a score of zero (0) being entered for that assignment.

Appeals Process - If you feel that there has been a mistake in your grade on an exam or another assignment you should talk with me so that we can decide whether or not I should reconsider the score I gave you. I will not consider grading appeals beyond one week after returning an assignment to you.

Academic Honesty - As is expected of all UGA students, I expect you to know and accept the standards contained in "A Culture of Honesty" (http://www.uga.edu/honesty/ahpd/culture_honesty.htm). Among other things, this commitment and statement means that you agree not to cheat, lie, or plagiarize. If you have questions about an assignment and academic integrity please ask me. Students who violate this policy will be reported to the Office of the Vice President for disciplinary action, and are subject to severe disciplinary penalties including the possible failure of the course and/or dismissal from the University.

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