



## **BIOL 3500L – Ecology Laboratory**

### **Course Syllabus – Fall 2015**

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Individuals with disabilities who need to request accommodations should contact the Disability Services Coordinator, Student Center 255, (678) 466-5445, [disabilityservices@mail.clayton.edu](mailto:disabilityservices@mail.clayton.edu).

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#### **Course Description:**

##### **Number and Title:**

BIOL 3500L (CRN 80709 & 80710)  
Ecology Laboratory

##### **Credit Hours:**

1.0 semester credit hour

##### **Catalog Description:**

Laboratory to accompany BIOL 3500, Ecology.

##### **Course Prerequisites and Co-requisites:**

- Prerequisites:
  - BIOL 3500, with a minimum grade of D (can be taken concurrently)

##### **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://www.clayton.edu/hub/itpchoice/notebookcomputerpolicy>.

## **Software Requirement:**

You will need the following software for analyzing data:

- Microsoft Excel™ (for manipulating and graphing data)
- R (for statistical analysis): <http://cran.stat.ucla.edu>
- R Studio (for making R more user-friendly):  
<https://www.rstudio.com/products/rstudio/download/>

To properly access the course content you will need the following software:

- Adobe Reader (for access to files in PDF format):  
<http://get.adobe.com/reader/>
- Adobe Flash (for access to video content):  
<http://get.adobe.com/flashplayer/>

## **Computer Skill Prerequisites:**

- Able to use the Windows™ operating system
- Able to use Microsoft Word™ word processing
- Able to send and receive e-mail using Outlook™ or Outlook Express™
- Able to attach and retrieve attached files via email
- Able to use a Web browser.

## **In-class Use of Student Notebook Computers:**

Notebook computers will be used extensively this course, and students are expected to bring their computers to lab nearly every week. Students who do not have their computers, when they are necessary for lab activities, will lose participation points for the day and will receive a penalty on graded assignments associated with the lab.

Students are expected to be respectful in their use of notebook computers – inappropriate use of computers during lab activities or discussions is not permitted.

## **GeorgiaVIEW Desire2Learn (Online Classroom):**

On-line activity will take place in Desire2Learn, the virtual classroom for the course.

You can gain access to Desire2Learn, by signing on to the SWAN portal and selecting: "D2L" on the top right side. If you experience any difficulties in Desire2Learn, please email or call The HUB at [TheHub@mail.clayton.edu](mailto:TheHub@mail.clayton.edu) or (678) 466-HELP. You will need to provide the date and time of the problem, your SWAN username, the name of the course that you are attempting to access, and your instructor's name.

## Biology Learning Outcomes:

BIOL 3500L is a required course in the B.S. degree program in Biology. BIOL 3500L supports all seven outcomes of the biology major:

- Effectively demonstrate knowledge of the basic principles of major fields of biology.
  - Demonstrate a mastery of a broad range of basic lab and technology skills applicable to biology.
  - Apply knowledge of physical science, mathematics, and statistics to biological concepts.
  - Communicate scientific information in a clear, concise manner both orally and in writing.
  - Demonstrate the ability to collect, evaluate and interpret scientific data, and employ critical thinking to solve problems in biological science and supporting fields
  - Collaborate effectively on team-oriented projects.
  - Demonstrate the ability to identify and describe the impact of biological science on the environment and society.
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## Course Learning Outcomes:

After this course, I want you to be able to:

- Apply the ecological concepts learned in lecture to investigate the nature of ecological systems.
  - Design studies that appropriately investigate scientific questions.
  - Manipulate and graph data using Microsoft Excel.
  - Perform and interpret statistical analyses of data.
  - Critically evaluate the experimental design and statistical analyses of other researchers.
  - Clearly communicate the details of scientific studies through writing.
  - Confidently articulate your ideas in group discussions.
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## Instructor Information:

### **Ann Showalter, PhD**

Email: [AnnShowalter@clayton.edu](mailto:AnnShowalter@clayton.edu)

Phone: (678) 466-4771

Website: [www.annshowalter.com](http://www.annshowalter.com)

Office: NBS 161

Office hours: Mon & Wed 2:15-5pm, Tues 1-1:45pm

The best way to contact me is via email. If you do not get a response within one business day, assume I did not get your email. I do not always check email on weekends. Do not contact me through the message service on Desire2Learn – I do not check this regularly.

**Class Meetings:**

**Classroom:** Natural and Behavioral Sciences Building, Room 138

**Class times:** Wednesday or Friday, 9:00am – 11:50am

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**Textbook Information:**

No textbook is required for lab. However, lab handouts will be made available on D2L.

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**Evaluation:**

Assignments & lab reports	115
In-class participation	35
<b>TOTAL</b>	<b>150</b>

\* The complete point break-down is on D2L.

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**Grading:**

<b>Grade</b>	<b>Percentage</b>
<b>A</b>	89.5 - 100%
<b>B</b>	79.5 – 89.4%
<b>C</b>	69.5 – 79.4%
<b>D</b>	59.5 – 69.4%
<b>F</b>	below 59.4%

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**Mid-term Progress Report:**

The mid-term grade in this course, which will be issued on October 1, reflects approximately 30% of the entire course grade. Based on this grade, students may choose to withdraw from the course and receive a grade of "W." Students

pursuing this option must fill out an official withdrawal form, available in the Office of the Registrar, or withdraw on-line using the Swan by mid-term, which occurs on October 9. [Instructions for withdrawing are provided at this link.](#)

**The last day to withdraw without academic accountability is Friday, October 9, 2015**

### Course Schedule:

This schedule is subject to change at the instructor's discretion.

Week	Date	Lab #	Topic
1	Aug 19/21		<b>Lab safety &amp; stats pre-assessment</b>
2	Aug 26/28	1	<b>Intro to experimental design &amp; stats</b>
3	Sept 2/4	2	<b>Leaf Stomata Lab: Week 1</b> Design study & collect data  <a href="#">Statistics worksheet due</a> <a href="#">Study proposal due at end of lab</a>
4	Sept 9/11	2	<b>Leaf Stomata Lab: Week 2</b> Finish data collection & analyze data
5	Sep 16/18	2	<b>Leaf Stomata Lab: Week 3</b> Presentations & discussion  <a href="#">Complete draft of Lab 2 report due</a>
6	Sep 23/35	3	<b>Plant Distribution Lab: Week 1</b> Design study & collect data
7	Sep 30/Oct 2	3	<b>Plant Distribution Lab: Week 2</b> Analyze data & discussion  <a href="#">Group data due</a> <a href="#">Final draft of Lab 2 report due</a>
8	Oct 7/9	4	<b>Parasitoid Competition Lab: Week 1</b> Design study & set-up experiment  <a href="#">Lab 3 report due</a>

	<b>Oct 9</b>		<b>Last day to withdraw without academic accountability</b>
9	Oct 14/16	5	<b>Benthic Invertebrate Diversity Lab: Week 1</b> Design study & collect samples  <a href="#">Study proposal for Lab 4 due</a>
10	Oct 21/23	5	<b>Benthic Invertebrate Diversity Lab: Week 2</b> Process samples  <a href="#">Study proposal due</a> <a href="#">Group data due</a> at end of lab
11	Oct 28/30	5	<b>Benthic Invertebrate Diversity Lab: Week 3</b> Analyze data & build food web  <a href="#">Organism life-style worksheet due</a>
12	Nov 4/6	5	<b>Benthic Invertebrate Diversity Lab: Week 4</b> Discussion & peer-review  <a href="#">Complete draft of Lab 5 report due</a>
13	Nov 11/13	4	<b>Parasitoid Competition Lab: Week 2</b> Collect & analyze data
14	Nov 18/20	4	<b>Parasitoid Competition Lab: Week 3</b> Discussion Stats post-assessment  <a href="#">Final draft of Lab 5 report due</a>
15	<b>Nov 25/27</b>		<b>NO LAB – Thanksgiving Holiday</b>
16	Dec 2/4		<b>NO LAB – Hurray!</b>  <a href="#">Lab 4 report due</a>

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**Course Policies:**

- Attendance is required for all lab periods, and labs CANNOT be made-up.**

*The good:* If you miss lab for legitimate reasons (e.g., jury duty, etc.), you must contact me immediately to discuss your options, and I expect documentation from an authority (doctor, judge, etc.) for your absence.

Ideally, you would attend the other lab section for the week. If that is not possible, then the missed points (for participation and any assignments) will not count against you. If you cannot provide documentation, then the absence is unexcused.

*The bad:* Unexcused absences will result in a zero for participation points on that day and a 5 point penalty on assignments associated with the lab (if the assignment is to be completed within the lab period, then you will receive a zero for the assignment).

*The ugly:* Because many of the labs will span multiple weeks, if you have two or more unexcused absences for a given lab (e.g., two of the four weeks for Lab 5), you will receive a zero on all assignments associated with that lab. However, your participation points will only be lost for the days for which you were absent.

2. **Show up on-time for lab each week.** You will be marked as late if you are more than 5 minutes late for lab. You can be late one time during the semester without penalty (a freebie!), but for every other tardy, you will lose half of your participation points for the day. If you are more than 20 minutes late, you will be counted as absent and incur the penalties associated with unexcused absences. There are no freebies for showing up 20 minutes late to class.

**Lab is scheduled for three hours**, and you are expected to remain in lab for the full lab period. Students who leave lab early will lose participation points for the day and may receive a penalty on assignments associated with the lab.

3. **Late policy on assignments.** Unless otherwise indicated, all assignments are due at the start of lab. Late assignments are subject to a penalty of 10% of the points for each day (i.e., 24 hour period) that the assignment is late.

Students who miss lab for valid (and documented) reasons are still held to the deadlines for assignments submitted to Dropbox. For example, if you have to miss lab because of jury duty, I still expect you to submit your assignments to Dropbox. Exceptions and waivers of late penalties may be made for extenuating circumstances.

4. **Most assignments will be submitted on Dropbox in D2L.** It is your responsibility to ensure that the appropriate documents have been submitted by the deadline. Submit documents as Word (.doc or .docx) or Excel (.xls, .xlsx, or .csv) files only – I will not accept Pages (sorry Mac users!), PDFs, or Google docs for any assignments. If you submit inappropriate documents (e.g., wrong file format or wrong assignment altogether), you will be subject to late penalties until you post the appropriate file to Dropbox.
5. **Respectful behavior is expected.** This means active listening when I am talking or when another student is talking during class discussions. Inappropriate side-conversations and the inappropriate use of laptops/cell phones is distracting to other students and disrespectful to everyone. Students repeatedly violating this policy will lose participation points and may be asked to leave the classroom for being disruptive.

6. **Come prepared to each lab**, by downloading all files and printing any handouts before lab begins, and bringing those documents and your computer to class. Details about what is needed for each lab period will be posted on D2L. Students who do not have their computers, when they are necessary for lab activities, will lose participation points for the day and will receive a penalty on graded assignments associated with the lab.
7. **Plagiarism will NOT be tolerated**, and any instances of plagiarism will be subject to disciplinary action (see Academic Dishonesty below). Ignorance is not an excuse. I consider your completion of the plagiarism awareness homework assignment in 3500 lecture as evidence that you understand the various forms of plagiarism. If you are ever in doubt, please ask me (or the Writers' Studio) for help.

## **General University Policies:**

### **General Policy**

Students must abide by policies in the [Clayton State University Student Resource Handbook](#), and the [Basic Undergraduate Student Responsibilities](#).

### **University Attendance Policy**

Students are expected to attend and participate in every class meeting. Instructors establish specific policies relating to absences in their courses and communicate these policies to the students through the course syllabi. Individual instructors, based upon the nature of the course, determine what effect excused and unexcused absences have in determining grades and upon students' ability to remain enrolled in their courses. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawals or failing grades.

### **Academic Dishonesty**

Any type of activity that is considered dishonest by reasonable standards may constitute academic misconduct. The most common forms of academic misconduct are violating testing procedures, cheating, and plagiarism. All instances of academic dishonesty will result in a grade of zero for the work involved. All instances of academic dishonesty will be reported to the [Office of Community Standards](#). Judicial procedures are described in the [Student Resource Handbook](#) (Procedures for Adjudicating Alleged Academic Conduct Infractions beginning on page 16).

### **Plagiarism Detection Software**

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. You should submit your papers in such a way that no identifying information about you is included.

### **Disruption of the Learning Environment**

Behavior which disrupts the teaching–learning process during class activities will not be tolerated. 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 behavior 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.

A more detailed description of examples of disruptive behavior and appeal procedures is provided at:

<http://www.clayton.edu/Portals/5/DisruptiveClassroomBehavior.pdf>

## **Writing & Study Help:**

### **Writing Assistance**

The Writers' Studio 224 is located in the A&S building, room 224. There you can talk with trained writing consultants about your writing projects. They are available to work with you at any stage of your paper, from generating ideas to organizing your paper to understanding how to format it correctly. The service is free; you may drop in and wait for a consultant or sign up for a regular appointment. But remember: you, not your consultant, are ultimately responsible for the quality and content of the papers you submit. Visit our website for more information: <http://clayton.edu/writersstudio>.

There you will find a link to register for appointments online:

<http://clayton.mywconline.com>

You will need to do a one-time registration. Simply click on the "Click here to register" link once at MYWCONLINE.

### **Operation Study**

At Clayton State University, 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. See the following site for details:

<http://www.clayton.edu/operation-study>

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**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.**

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*Last update: August 11, 2015*

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