General Ecology LAB – BIO3081
Course syllabus - Fall 2020
Instructor: Dr. Carmen G Montaña-Schalk

Location and Times: TUESDAYS 2:30-5:30pm, Miller Science Building 134A, OTHER LOCATION ON CAMPUS
Office: Miller Science Building # 123
Office hours: Monday: 8:00- 11:00 am
By appointment [contact Dr. Montaña by email at montanascg@sfasu.edu and allow at least 24 hours in advance to schedule times other than those listed in the office hours]

Email: montanascg@sfasu.edu (preferred contact)

Note: Do not contact me via D2L. The main method to communicate with me is via email: (montanascg@sfasu.edu).

COVID-19 MASK POLICY
Masks (cloth face coverings) must be worn over the nose and mouth at all times in this class and appropriate physical distancing must be observed. Students not wearing a mask and/or not observing appropriate physical distancing will be asked to leave the class. All incidents of not wearing a mask and/or not observing appropriate physical distancing will be reported to the Office of Student Rights and Responsibilities. Students who are reported for multiple infractions of not wearing a mask and/or not observing appropriate physical distancing may be subject to disciplinary actions.


Lab: No lab manual Required – Library Access may be necessary. Handouts will be provided

Course Description and Objectives: Ecology lab will provide applications to the major ecological principles covered in lecture. Upon completion, students will have a basic level of experience for experimental techniques in ecology labs. Additionally, students will enhance their technical writing (or science writing) skills and become familiar with basic data analysis in Microsoft applications. Overall, the lab section of General Ecology will provide students’ skills that are relevant to post-graduate work in science and will enhance competitiveness in the workforce.
The mandatory laboratory portion of this class will reinforce, using a hands-on approach, the 4 major areas of ecological study (i.e., organismal, population, community, and ecosystem). For each area of ecology, we will conduct a complete scientific study following the specific steps of the scientific method. You will be required to actively participate in each step for your grade.

Laboratory (25%) The mandatory laboratory portion of this class will reinforce, using a hands-on approach, the 4 major areas of ecological study (i.e., organismal, population, community, and ecosystem). For each area of ecology, we will conduct a complete scientific study following the specific steps of the scientific method. You will be required to actively participate in each step for your grade.

The labs will be held at the lab but also outdoor on SFA campus facilities. Be prepared to be outside and in the elements. This is an ecology lab and we will be getting our hands dirty. Also, some of the outdoor activities may keep us out past that time, so please plan accordingly.

Specifics for labs will be presented in the special lab syllabus.
[Some lab activities will take place outdoor in terrestrial and water ecosystems. When outdoor, in the field, each student should dress appropriately, i.e., no sandals or flip-flops. Rather, each student should purchase an inexpensive pair of rubber boots, waters or hip waders. Boots, light long pants and long-sleeve shirts are ideal for fieldwork. When being outdoor, we are exposed to wild animals including snakes, ticks and chiggers, so proper attire is necessary]
D2L and Email: I will communicate with the class using email via D2L and email. Thus, I expect you to check your email regularly for information regarding the class. Missing an email announcement is not an excuse for missing an assignment. Moreover, I will post general information about assignments and labs on D2L. It is your responsibility to obtain these documents and to learn how to navigate D2L, upload assignments to D2L, etc. Assignments, documents, and grading will be on the lab-specific sections of D2L.

On-Line Component: The lab portion of this course may include some online components. The on-line activities will include lecture you-tube videos and readings that further explain ecological topics/principals.

Attendance: Attendance in this class and laboratory is mandatory, expected, and often is directly correlated with a passing grade. If you want to understand and learn ecology, don’t miss labs.

Absence and Make-up Policy: Any points for assignments, participation, or labs missed as a result of an absence cannot be made-up. The only exception is if the absence is planned and approved by the instructor at least 15 days prior to the date of absence. In this case an alternative assignment will be given and turned in before the absence. No late assignments will be accepted.

Grading: The lab will be scaled to 200 points, then will make up 25% of your total course grade at the end (25% lab + 75% lecture). There will be a weekly report based on the previous week’s lab activities. If lab is missed one week, the assignment cannot be accepted the following week. If students are coming unprepared to labs, I may start giving pre-lab quizzes, which will be incorporated into total grade.

Note: When in outdoor activities, each student should dress appropriately, i.e., no sandals or flip-flops. Rather, each student should purchase an inexpensive pair of rubber boots or hip waders. Boots, long pants and long-sleeve shirts are ideal for fieldwork.

Report guideline/Rubric. See rubric page provided by the professor
**TENTATIVE LAB TOPICS** (**: outdoor activity may be subject to change due to weather conditions)

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Lab topics</th>
<th>Locations</th>
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<tbody>
<tr>
<td>8/25</td>
<td>Orientation/Syllabus; lab safety, Expectations Lab projects/reports introduction/leaf pack experiments</td>
<td>Miller Science # 134</td>
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<tr>
<td>9/1</td>
<td>Ecosystems: ecosystem functions and services (<em>outdoor lab</em>) <strong>(15pts)</strong> - Identify types of ecosystems: terrestrial/aquatic - Identify function and services of ecosystems - Deploy of leaf packs</td>
<td>Pinewood Native Plan Center**</td>
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<td>9/8</td>
<td>Sampling &amp; Statistics (<em>indoor lab</em>) (10pts) Sample description and testing - Sample, range, Mean (Averages), media, mode, Standard deviations, Parametric and non-parametric analyses, T-test, ANOVA</td>
<td>Miller Science # 134</td>
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<td>9/22</td>
<td>Sampling methods for terrestrial ecosystems (<em>outdoor lab</em>) <strong>(20pts)</strong> - Quadrat and Transect sampling - Capture techniques: nets, traps, etc. - Biotic sampling metrics: density, frequency, biomass - Plants Distribution patterns (observations)</td>
<td>Pinewood Native Plan Center**</td>
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<tr>
<td>9/29</td>
<td>Sampling methods for Aquatic ecosystems (<em>outdoor lab</em>) (20pts) - Transects, CPUE, - Capture techniques: electrofishing, seining. - Biotic sampling metrics: density, frequency, biomass</td>
<td>La Nana Creek by** bridge at E. College St.</td>
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<td>10/6</td>
<td>Life Table Data Collection (<em>outdoor lab</em>)** (20pts) - Construction of life tables and survivorship curves</td>
<td>Oak Grove Cemetery**</td>
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<td>10/13</td>
<td>Mark/recapture techniques and calculations (<em>outdoor lab</em>)** (15pts) - Fish populations</td>
<td>La Nana Creek by** bridge at E. College St.</td>
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<td>10/20</td>
<td>Species-Area curves, species diversity indices (<em>outdoor lab</em>)** (20pts) Data collection and calculations</td>
<td>Pinewood Native Plan Center**</td>
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<td>10/27</td>
<td>Leak packs experiments (<em>outdoor lab</em>)** Reading assigned* (20pts) - Leaf pack collection - Water quality measurements - Sorting and classification of taxonomic groups</td>
<td>La Nana Creek by** bridge at E. College St.</td>
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<td>11/3</td>
<td>Leak packs experiments (<em>indoor lab</em>) (15pts) Functional groups and food webs classification Calculation of diversity indices</td>
<td>Miller Science # 218 (or 216) TDB</td>
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<td>11/10</td>
<td>Ecosystem Ecology: Part 1 (15pts) - Energy Transfer in a Model Ecosystem</td>
<td>Miller Science # 134</td>
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<td>11/17</td>
<td>Ecosystem Ecology: Part 2 (10pts) - Respiration/ ecosystem productivity</td>
<td>Ag Pond</td>
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<tr>
<th>11/23-11/27</th>
<th>THANKSGIVING BREAK</th>
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<tr>
<td>11/30</td>
<td>REPORTS DUE</td>
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<td>12/2 -112/11</td>
<td>TBD</td>
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**CLASS POLICIES**

**Attendance:** Attendance in this class and laboratory is mandatory, expected, and often is directly correlated with grade. Most examination questions come from lectures and experiences show that those students who attend class consistently obtain the highest grade. Attendance will be recorded at the beginning of each class period. If you want to understand and learn ecology, don’t miss class or lab.

**Academic Integrity:** I expect all students to maintain honesty and integrity in this class. Academic dishonesty includes cheating on exams, copying others work, and pasting text directly from the internet (i.e., plagiarism), etc. Cheating will absolutely not be tolerated. Be sure to review the university’s academic integrity policy which can be found at [http://www.sfasu.edu/policies/4.1-student-academic-dishonesty.pdf](http://www.sfasu.edu/policies/4.1-student-academic-dishonesty.pdf)

Cheating on an exam can result in a failing grade for that exam, a failing grade for the course, or even expulsion from the university.

Below is SFA’s statement regarding academic integrity.

> Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty. Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit.

**Students with Disabilities.** To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004/468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Absence and Make-up Policy:** Any points for assignments, participation, or exams missed as a result of an absence cannot be made-up. The only exception is if the absence is planned and approved by the instructor at least 15 days prior to the date of absence. In this case an alternative assignment will be given and turned in before the absence.

**CLASSROOM CONDUCT—** All students in the class must treat others with civility and respect and conduct themselves during class sessions in a way that does not unreasonably interfere with the opportunity of other students to learn.

**CLASS DISRUPTIONS:** Class disruptions will not be tolerated because they detract from other students’ learning. As adults, students should be able to sit through class without disturbing others. It is recommended that students regard lecture as practice for future professional meetings; they may be fun, interesting, or horribly boring. Regardless, the student has to get through lectures acting like an adult. SFA defines acceptable behavior as follows:

**Acceptable Student Behavior**

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom.
Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

**Dr. Montaña does NOT necessarily give you a warning or make an announcement that you are disrupting class.** Instead, points will simply be deducted in the grade book (*5 points deducted each time*). Students are free to inquire at any time whether they have had points deducted during office hours.

**Tardiness:** Tardiness to lecture will not be tolerated; it disrupts the lesson and the concentration of fellow students. Reasonable accommodations will be made in cases of emergency situations if documentation is provided. It is the student’s responsibility to provide the instructor with documentation of emergencies. (*points deducted each time*)

**Sleeping:** Sleeping during class can be distracting to other students and the instructor. If a student is so tired that they cannot stay awake for a lecture, as boring as it may be, the student should not be in class.

**Cell Phones:** Cell phones must be turned off during lecture. If a cell phone goes off, the student may be asked to leave lecture for that day. In cases of family health (pregnant spouse, hospitalized family member, etc.), the student must inform the instructor of the situation BEFORE class begins. In these cases, the cell phone ringer must remain off (i.e., phone set to vibrate).

**Leaving Class:** Leaving class is disruptive to other students who are trying to pay attention. Leaving the class for any reason will count against you. *This includes leaving during exams to use the restroom.* Hence, be sure to use the restroom before coming to class. If a student knows they will need to leave class early, notify the instructor well ahead of time. Points will not be deducted if the student has a legitimate excuse for leaving early.

**Talking/Disruptive Behaviors:** Dr. Montaña highly encourages students to ask questions or make relevant comments during a lecture. However, talking to a neighbor or other disruptive behavior will not be tolerated because, again, it disrupts the learning environment of other students.

**Laptop computers:** Laptop computers are not allowed in the lab UNLESS upon request by Dr. Montana. In my past experience, too many students have used them for surfing the internet or working on other projects during lecture, which distracts other students.

*If you have difficulties or complaints related to this course, your first action usually should be to discuss them with Dr. Montaña.*