

 **Department of Biological Science** 800 North State College Boulevard, MH-282

 College of Natural Sciences & Mathematics Fullerton, California 92834-6850

 http://biology.fullerton.edu 657-278-3614 / Fax 657-278-3426

**Undergraduate Variable-Unit Request Form for Advanced Topics (480), Directed Study (299L), and/or Independent Study (499L)**

As a general rule, it is expected that students will work **no less than** 45 hours per semester per unit on the objectives/products for the course they are enrolled in (more hours may be expected for independent study depending on the work/objectives required). Grades will be based on attendance and participation and on the quality of the work that you complete relative to your goals, which will be outlined in consultation with your adviser. The most important factor for your grade is the quality of your work.

**No more than** a combined total of six units of [BIOL 480](http://catalog.fullerton.edu/preview_program.php?catoid=16&poid=7507#tt6177) (2 units maximum), [BIOL 482](http://catalog.fullerton.edu/preview_program.php?catoid=16&poid=7507#tt9392) (2 units maximum), [BIOL 495](http://catalog.fullerton.edu/preview_program.php?catoid=16&poid=7507#tt9217) (3 units maximum), [BIOL 498](http://catalog.fullerton.edu/preview_program.php?catoid=16&poid=7507#tt9730) (2 units maximum) and [BIOL 499L](http://catalog.fullerton.edu/preview_program.php?catoid=16&poid=7507#tt8574) (6 units maximum) shall be counted toward the upper-division biology units required for the major, and no more than three of these units may count toward the requirement to complete at least five units of upper-division biology laboratory/field electives.

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| **Student Name (Last, First, MI) PRINT**     @csu.fullerton.edu | **CWID**       | **Semester/Year**      |
| **Student CSUF Email**        | **Contact Phone Registration Date**       |
| **Faculty Name PRINT** | **Supervisor Name (only if different)** |

1. **Advanced Topics**

**Select one:**

[ ] **480** – Advanced Topics in Undergraduate Biology (1-3 units): Current topics, updating of concepts, recent advances and unification of the principles of biology.

 **Section number:** **Class number:** **Number of Units:**

 Expectations & Responsibilities (check all that apply):

|  |  |  |
| --- | --- | --- |
| [ ]  Attend Group Meetings | [ ]  Present at Group Meetings | [ ]  Analyze and Discuss Primary Literature |
| [ ]  Meet with Advisor Regularly | [ ]  Collaborate with laboratory group members |  |
| [ ]  Other:       |

1. **Directed or Independent Study (expectations and goals are on page 2)**

**Select one:**

[ ] **299L** – Directed Field or Laboratory Study (1-3 units): Research under the supervision of a faculty member. For students who may not have completed sufficient coursework or lab experience to allow them to work independently.

**Grade Option (select one):** CR / No CR [ ]  **OR** Letter Grade [ ]

 **Section number:    Class number:       Number of Units:**

[ ] **499L** – Independent Field or Laboratory Study (1-3 units): Independent research study of a topic selected in consultation with and completed under the supervision of the faculty member.

 **Section number:    Class number:       Number of Units:**

1. **Directed or Independent Study Write-Up**

For Directed or Independent Study course registration, please provide a brief write-up that describes the following (250 words):

**Goals:** Describe the goals of the proposed Independent or Directed study. Collaboratively written by student and instructor.

 **Expectations and deliverables:** Describe student expectations. Must include the number of meetings during the semester and written product(s) or project. Collaboratively written by student and instructor. (250 words)

**Basis for final evaluation:** Describe how the student will be assessed and how grades will be assigned. Overall grade shall include all aspects of expectations above, such as meetings and evaluation of written products(s) or project. Must indicate what constitutes the final grade (A,B,C, *etc*.). To be written by instructor. (250 words)

**D. Approvals**

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*Student Signature**Date*

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*Supervisor Signature**Date*

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*Department Chair Signature* *Date*

**California State University, Fullerton
Department of Biological Science
Laboratory and Field Safety Procedures**

**Safety must be a primary consideration for all persons working in a biological laboratory or field site.**

Laboratory/Field activities have been selected for their interest and relevance to the lecture class material as well as their expected safety for students learning new techniques. Students have the responsibility for learning and understanding the appropriate safety procedures for each specific activity. Further, each student has an obligation to consult the instructor for help when safety procedures or instructions are not clear. The following general procedures must be observed.

1. Before beginning the first activity, familiarize yourself with the location of all safety equipment: e.g., safety shower, eye wash, or sink area. Consult with your instructor regarding the proper operation of this equipment. (Small fires can usually be extinguished by smothering. Fire extinguishers should be used only by trained personnel. Use them only if you are confident that you know the proper procedures and can safely use them.) Note that all safety precautions are described in the lab/field experimental protocols.
2. Approved goggles or safety glasses with side shields must be worn at all times while you or others are working with any hazardous chemical materials or liquids that could splash into a person’s eye. Anyone not complying with this requirement will not be in the laboratory.
3. Wear the appropriate clothing for lab/field activities. In the lab, this includes eye protection, closed-toe shoes, and a lab coat; in the field appropriate clothing for the environment as noted in the course materials and by the instructor. There will be no exceptions.
4. Laboratory bench work is not permitted in the laboratory when an instructor is not present. Follow up activities outside of regular class periods must occur in accordance with schedules set up by the laboratory instructor. Performance of unauthorized experiments is not allowed.
5. None of the following is permitted in the laboratory at any time: application of cosmetics (including Chapstick), smoking, eating, drinking, or sitting on lab benches.
6. No personal electronic devices (such as cell phones, pagers, radios, video cameras, etc.) are permitted in the lab or during field activities except when used for instructor-approved educational/safety purposes.
7. Visitors to the lab are not allowed except by express permission of the instructor and department chair. Visitors are required to have the same eye protection and lab wear as the others in the laboratory and must complete and sign a Personal Liability Waiver Form.
8. Dispose of all materials, including animal parts, chemicals, glassware, and plasticware, in the correct manner as shown by your instructor.
9. Report any accident even the most minor to your lab instructor.
10. In case of a chemical splash of any type, flush the area thoroughly with water for at least 15 minutes. For chemicals in the eyes, use eyewash if available; and if not, use water from a sink faucet.
11. Animal use is regulated by the Institutional Animal Care and Use Committee and approved protocols must be adhered to precisely. If live vertebrate animals are being used, your instructor will discuss the appropriate procedures, which will also be included in your lab/field manual or handouts. Understand them and follow them.
12. At the end of any lab- or field-associated activities, you must return the work space to the original state before you leave the area. Clean up all debris, spills, etc. And do not leave any materials out.
13. Do not use equipment of supplies from any lab other than the one assigned to your class unless authorized to do so by your instructor.
14. Wash your hands before you leave the laboratory.
15. Phone numbers in case of emergency: 911; 2525 (Campus Police); 7233 (Environmental Health and Safety).

**I have read and will abide by all of the above lab safety regulations.**

BIOL \_     Sect# \_  \_\_ Class#\_      Date\_     \_ CWID# \_\_     \_\_

STUDENT Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Print Name

*Approved 10 Sep 2004; #7 updated Dec 04*