

BSC 493 – Research Experience (1-3 cr)

Description

BSC 493 provides an opportunity for students to gain real-world experience in a scientific research program. A minimum of 45 hours must be completed for each credit hour earned (3 credits maximum in a given semester for one experience). The experience must be arranged by the student and approved by the Department of Biological Sciences in advance. To gain approval, students must submit the completed BSC 493 Contract, signed by their 493 research mentor and by their academic advisor. Research mentors are encouraged to require a research paper or poster presentation as part of the work expectations when appropriate. In addition to the work described in the contract, students will complete a series of reflective written assignments during and at the end of their 493 experience.

Learning Outcomes

After completing BSC 493, students will be able to:

- describe the goal of their research project and their specific role(s) in that project
 - describe the professional competencies they developed or deepened through their research experience
 - explain how they applied their academic (in-class) experiences to their research experience
 - describe the knowledge and skills they gained or further developed through their research experience
 - describe how their research experience changed or strengthened their academic or career goals
 - explain how their understanding of the nature and practice of science was impacted by their research experience
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Course Schedule

There are no set meeting times for BSC 493 – the work schedule is by agreement between you and your research mentor. Time commitment is expected to be a minimum of 45 hours engaged in the learning experience (including all work expectations specified by the mentor) for every 1 credit hour earned, plus time spent on several short written assignments to be submitted through Moodle. Due dates for these assignments are provided on the course Moodle site.

Prerequisites and Restrictions

Restricted to students who have completed the required course contract (attached) and received the approval of their proposed BSC 493 mentor, their academic advisor, and the Department of Biological Sciences. Students must submit the completed contract before they will be enrolled in the course and added to the course Moodle site. Students can repeat BSC 493 for different or more advanced experiences, but there may be a limit on the number of credit hours that they can use toward graduation in their curriculum. Students must ensure that all aspects of the experience conform to the Code of Student Conduct.

Honor Pledge

Your submission of any test or assignment indicates "I have neither given nor received unauthorized aid on this test or assignment."

Requirements for Auditors (AU)

BSC 493 cannot be audited.

Moodle Website and Electronically-Hosted Course Components

You will submit required materials via the course Moodle website during and at the end of your learning experience. You should be able to access the course website at [http:// wolfware.ncsu.edu](http://wolfware.ncsu.edu).

You will not be required to disclose personally identifiable information to other students in the course.

Grading

The basis of the S or U grade will be the contract agreed to by the student, their research mentor, and the student's academic advisor. Students must complete the minimum number of hours of expected work and requirements as specified in the BSC 493 contract, as well as all written assignments on Moodle. It is likely that the research mentor will require an additional written assignment or presentation of some form, and there should be a clear explanation on the BSC 493 contract with regard to those expectations.

The written assignments on Moodle will include four sets of questions with due dates spread throughout the experience. The first set of questions (25%), due early in the experience, involve describing the nature of the learning experience and the student's expectations for that experience. The second set of questions (25%) involve a reflection on knowledge and skills (including professional competencies) gained or deepened during the experience. The third set of questions (25%) involve a reflection on the relationship between the student's academic (in-class) studies and the learning experience. The final set of questions (25%), due after the experience has been completed, will involve a broader reflection on what the student learned from the experience and how they have grown as a result of the experience.

To earn an 'S' for BSC 493, students must answer all Moodle questions and must earn at least 70% on the Moodle questions (combined). If the mentor requires an additional assignment (e.g., proposal, paper, poster, presentation) and wants that assignment to contribute to the grade calculation, the student must answer all Moodle questions and must earn at least 70% on the Moodle questions (combined) and at least 70% on the additional assignment to earn an 'S' for BSC 493.

Student participation and completion of the required work will be verified by having the research mentor complete a brief evaluation.

Policies on Incomplete Grades and Late Assignments

Incompletes are allowed only at the discretion of the mentor and advisor. Detailed arrangements for completion of the required work must be made prior to the end of finals for the semester in which the student is enrolled. It is the student's responsibility to make sure that these arrangements are made with the mentor and communicated to the academic advisor.

If an extended deadline is not authorized by the mentor or department, an unfinished incomplete grade will automatically change to a U after either (a) the end of the next regular semester in which the student is

enrolled (not including summer sessions), or (b) the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to U will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at <https://policies.ncsu.edu/regulation/reg-02-50-03>

Accommodations for Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, student must register with the Disability Services Office (<https://dso.dasa.ncsu.edu/>) located at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation at <https://policies.ncsu.edu/regulation/reg-02-20-01>

Policy on Discrimination

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <https://policies.ncsu.edu/regulation/reg-04-25-02>. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 515-3148.

Academic Integrity

Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at <https://policies.ncsu.edu/policy/pol-11-35-01>. Students must ensure that all aspects of the experience conform to the Code of Student Conduct.

We take seriously our responsibility to provide a fair environment for all students, so all suspected violations of this policy will be reported to the Office of Student Conduct.

It is the department's understanding and expectation that the submission of any assignment means that the student neither gave nor received unauthorized aid on that assignment. Giving or receiving unauthorized aid will result in a 'U' for this course as well as more severe disciplinary penalties.
