BIOLOGY 399 / 499 - Independent Study APPLICATION FOR REGISTRATION

Name:				School	
	Last	First	MI		
Penn ID #				Email	

PLEASE READ CAREFULLY.

Currently, students will not need approval from the college to conduct in-person research this semester. You will be notified as soon as possible if there are any changes. Students are still allowed to conduct remote projects and will NOT be required to pursue an in-person project. This spring semester, the Biology department is offering BIOL 425 and BIOL 376 as alternatives to completing research requirements. <u>Literary reviews and grant proposals, which were considered as replacement for the final paper of the spring 2020 semester's independent study, will not be accepted this semester. For more information on the alternatives to independent study, please visit our website or email bio-undergraduate@sas.upenn.edu.</u>

Applying for BIOL 399/499:

- 1. Attach a description of your proposed project* to this form. **See BIOL 399/499 Proposal Guidelines** for more information. **Your sponsor must sign the project proposal.**
- 2. Registration for BIOL 399 and 499 is by permit only. The Biology Academic Office in Leidy 102 will issue section numbers for those permitted to enroll in the course.
- 3. This form must be signed by your sponsor (the person in whose lab you are working) and, if the sponsor is not a member of the undergraduate Biology department, by a **Biology faculty member as co-sponsor**. Biology faculty members are not obligated to co-sponsor a project. If you cannot find a Biology faculty member to co-sponsor your project, there are alternatives to Biology independent study. In some cases, you may be allowed to register for College 99 (independent study in CAS), or BENF 99 if you are a Ben Franklin Scholar. You must obtain permission from the College in order to register for College99 or BENF 99. Please note that neither College99 nor BENF99 will count for credit towards the Biology Major.

Guidelines for BIOL 399/499:

Prior to enrollment in independent study, the **faculty sponsor**, **faculty co-sponsor** (if applicable), and **student** must agree to the following policies by signing this document.

- 1. Faculty sponsors and co-sponsors must agree that the student can use all data generated during the project in preparing the required research paper and, potentially, an honors thesis. BIOL 399/499 students cannot work on projects in which data will be withheld due to commercial agreements or any other barrier to free dissemination of research information.
- 2. Projects that have a strictly clinical focus are usually not suitable for BIOL 399/499 credit.
- 3. If relevant to their projects, students must be trained in laboratory safety, radiation safety, and care of animals. The faculty sponsor is responsible for ensuring that the student receives this training.
- 4. **A research paper is required** at the end of all BIOL 399 and 499 projects. **Sponsors and cosponsors are not able to waive this requirement.**

- 5. The research paper is to be in the format of a journal article summarizing the student's research and any relevant background literature. The paper should describe the research question and its importance, what methods were used, what results (data) were collected, and the significance of the results. All of the above information should be presented in the student's own words. Students must explicitly state who is responsible for any data, graphs, photographs, or technical information included in their paper. If a BIOL 399 student has spent most of the semester working out problems with their methods—meaning that very little data may have been collected—then emphasis in the paper should be placed on a description and analysis of the experimental approaches used and any modifications made to the original research plan.
- 6. A student is normally expected to devote 10 20 hours/week to the project. This time should include reading, research time, meetings with research mentors, and paper preparation.
- 7. A project period **generally** ends on **the last reading day of the semester**. The research paper should be submitted by this deadline. **The specific due date should be determined in consultation with the sponsor and co-sponsor**. Sponsors and co-sponsors should refrain from extending independent study into the exam period and beyond.
- 8. The research paper must be submitted to both the sponsor and co-sponsor. Grades for BIOL 399/499 will be decided in consultation with the Biology department faculty co-sponsor. A grade of "A" signifies truly outstanding work during the semester and an outstanding research paper.
- 9. Sponsors may not waive any of the above requirements.

we acknowledge and agree to follow the policies out	linea above.
Student Signature	
Sponsors: Please send an e-mail to the academic office (I project co-sponsor describing the nature of the student's doing, and the frequency and nature of contact between y Your email should also state whether or not you employ differentiate the work for which the student will be compared to the student will be compared to the student will not be awar circulation of the final paper (or honors thesis) among	research, any reading that the student will be you, other project overseers, and the student. the student, and if so, explain how you will bensated from the student's unpaid Biol 399 or ded if there are restrictions on the
Sponsor's Name and Position/Department (must be Penn faculty)	Signature
Sponsor's e-mail address	
Co-Sponsor's Name (if applicable)	Signature

Copies of the signed agreement will be sent by e-mail to the student and sponsor for their records. This completed form, along with the project proposal, is due by the end of the day on Thursday, January 28th.