Independent Study Enrollment Request

Program in Biology // Undergraduate Program in Neuroscience
: 1140 Undergrad. Science Bldg. (USB) : http://www.lsa.umich.edu/biology
: lsa-biology-advising@umich.edu : 734-763-7984

[SEE POLICIES Attached]

Student Name:		Date:	
UMID:		Unique Name:	
Major:		Cum. GPA:	
☐BIOLOGY ☐EEB ☐MCDB	☐200 ☐300 ☐400	Credits* (1-3):	Term:
Project Title:			

*See credit policies on attached info. sheet.

Attach a description of your project (1-2 paragraphs).
You will need to discuss this thoroughly with your faculty sponsor(s) prior to completing this form.

Course	*Prerequisites:*
BIOLOGY 200	None
EEB or MCDB 300	8 or more BIO course credits (non-AP) and 3.0 or greater GPA
EEB or MCDB 400	12 or more BIO course credits (non-AP), EEB/MCDB 300, and >3.0 GPA

☐ I have met the required prerequisites for my requested course.
☐ I have read and understand the Program in Biology undergraduate research policies.

_____
Student Signature Date

FACULTY SPONSOR (PI):
I have read the Biology research policies and agree that the experience I will provide in my lab meets the stated expectations.

Sponsor Name:	Title:
Signature:	Date:

CO-SPONSOR (EEB or MCDB research faculty member if mentor is out-of-unit):
I have read the student's research proposal, the Biology research policies, and agree to co-sponsor the project. I agree that the project is appropriate for the student's major and I will meet with the student to discuss the work as needed. I have also made arrangements with the sponsor as to how registration and grading will be handled.

Co-Sponsor Name:	Title:
Signature:	Date:

Program in Biology
1140 USB, lsa-biology-advising@umich.edu, 734.763.7984

What is Independent Research?
Independent research is defined as a lab, field, or modeling project in which the student will have a say in the design, carrying out, and interpretation of experiments. It is expected that the student will meet regularly with his or her mentor, and will also gain exposure to the scientific literature of the field. It is recognized that many research projects will begin with a semester during which the student is mainly learning experimental techniques. Experiences that are strictly technical are not eligible for independent research credit, but it is appropriate for the student to receive credit for independent research during a term he or she is mainly learning techniques, as long as the project is structured in a way that will eventually lead to independence. Projects involving human subjects or patient records usually are *not appropriate* for an EEB/MCDB 300 or 400 election.

What if my Faculty Sponsor is not an EEB or MCDB faculty member?
A student wishing to receive credit toward his or her major for research done under the direction of a faculty member *in another department or unit of the University* must obtain approval from a faculty member in the Department of EEB or MCDB, who agrees to serve as co-sponsor **before** beginning the project. A prospective co-sponsor will verify that the proposed research meets all of the criteria required of research carried out within the Department of EEB or MCDB. The faculty co-sponsor will review the research proposal and decide the appropriateness of the nature of the research. The co-sponsor will also confirm that the project is biological in nature, that it will help the student develop independence and is not simply a technical training exercise. (Note: Microbiology concentrators who elect to take Micro 399 do not need to find a co-sponsor, nor does a Neuroscience concentrator who elects to take Psych independent study elections).

Can I take an undergraduate research course offered in a different department?
If an external unit or department offers its own undergraduate research course, the student may elect it instead of EEB or MCDB 300 or 400. However, to be eligible for major credit, the project must be co-sponsored (as described above). If this option is chosen, the course may count as a cognate course for those majors that accept cognate courses as part of the major. (See individual major requirements to determine if a cognate course can count toward the major.)
Note that, per LS&A policy: Candidates for an A.B., B.S., or B.G.S. degree must complete a minimum 100 credits of LSA courses, allowing 20 credits of non-LSA course work in the minimum 120 required for the degree. Non-LSA credits in excess of 20 will be included in the calculation of a student's GPA, but will not be counted toward the 120 credits needed for a Bachelor's degree in LSA.

Can I repeat the course?
Students can register for BIOLOGY 200 for up to 6 credit hours and EEB/MCDB 300 or 400 for a maximum of 9 credits each; however, only a maximum of 3 credits will be applied toward the major (with the exception of the EEB major which allows 6). If a student elects to take more than the major-approved number of credits of independent research, the extra credits will count towards the student's general pool of 120 credits required to graduate from LS&A.

College of LS&A Policies: A combined total of 30 credits of Experiential and Directed Reading/Independent Study courses may be counted in the 120 credits required for a degree. Experiential and Independent Study courses are excluded from area distribution plans.
http://www.lsa.umich.edu/students/academicsrequirements/academicpolicies/creditlimits/indsandexpr

Which course do I elect? What are the prerequisites?

Course	*Prerequisites:*
BIOLOGY 200	None
EEB or MCDB 300	8 or more Biology course credits (non-AP) and 3.0 or greater science GPA
EEB or MCDB 400	12 or more Biology course credits (non-AP), EEB/MCDB 300, and >3.0 science GPA

How many credits will count toward my major?

Major	*Max. Credits*	*Courses Eligible*
Biology and General Biology	3	BIOLOGY 200, or EEB/MCDB 300 or 400
Plant Biology	3	EEB/MCDB 300 or 400
Cellular and Molecular Biology	3	MCDB 400
Microbiology	3	EEB/MCDB 400, MICRBIOL 399, EPID 399 (2nd term), or INTMED 499 (2nd term)
Ecology and Evolutionary Biology	6	EEB/MCDB 300 or 400
Neuroscience	3	MCDB 300 or 400, or appropriate PSYCH course

What Program in Biology major requirements will the experience fulfill?

Course Options	*Credit Election*	*Major*	*Requirement*
BIOLOGY 200	1-3	Biology, General Biology, Ecology and Evolutionary Biology	Additional Elective
EEB/MCDB 300 or 400	3	General Biology, Plant Biology	Lab
		Biology	Lab, Upper-Level Elective
		Ecology and Evolutionary Biology	Lab, Research Experience
	1 or 2	Biology, General Biology, Plant Biology, Ecology and Evolutionary Biology	Additional Elective
MCDB 400	3	Cellular and Molecular Biology	Adv. Lab or Adv. CMB
EEB/MCDB 400, MICRBIOL 399, EPID 399 (2nd term), or INTMED 499 (2nd term)	2-3	Microbiology	Additional Elective
MCDB 300/400, or PSYCH option	2-3*	Neuroscience	Lab

* A student who elects MCDB 300 or 400 has the option of taking 2 credits to fulfill the requirement; otherwise the student must take 3 credits from one of the approved PSYCH courses.

Can I take the course pass/fall?

All research courses that will be used as part of a major must be assigned letter grades.

Credit Guidelines:

Independent study courses may be elected for between one and three credits. Credits may be elected by following these general guidelines: 3-5 hours a week of serious academic work (e.g. reading, discussion with a faculty member, writing) or 4-5 hours of laboratory work per week generally earns one full semester hour credit.