Participating in Research in an NIU Biology Professor‘s Lab

   requires at least 3.0 biosciGPA

# What is a “biosciGPA”? Your GPA in BIOS courses plus courses required for the BIOS major (CHEM 210, 211, 212, 213, 330 or 336, 331 or 337; MATH 229, 230 or MATH 211, STAT301; PHYS 210 and 211 or 253 and 273). Both NIU and transfer credits count. Compute biosci GPA calculation by including only those courses just listed: ((number of credits of A’s \* 4) + (number of credits of B’s \*3) + (number of credits of C’s \*2) + (number of credits of D’s \*1) + (number of credits of F’s \*0)) / (number of credits total from those courses). There are also online GPA calculators.

# **How big of a time commitment is it?** Roughly 3 hours per week of work for each hour of credit.

# When can I start?  Most students start their junior year because by then they have a solid background through coursework.

# How do I pick a professor to work with? There is no list of professors with openings.

Check out [professors and their research](https://niu.edu/biology/academics/undergraduate-studies/research.shtml) for more complete information on their research and to their contact information. The research does not have to be in the exact field that you plan a career in. The general process of doing science is what matters. For example, the first undergraduate research that I did was on leaf decomposition, but now I work on insect behavior. I chose the professor because he had a good reputation in research and in working with students. I learned general principles of experimental design, analysis, interpretation, literature search and scientific writing.

# How do I contact a professor? Email them an unofficial copy of your college transcripts. Say that you are interested in working in their lab for undergraduate research credits. Ask if they might have room in their lab that semester for you; ask for an appointment to meet with them. Include one or two sentences as to what career or area of biology interests you. If you do not hear from the professor in about a week, stop by their office to follow up. Professors are not required to let undergraduates participate in their research; they do it because they enjoy working with students that are motivated, perseverant and hard working. This is important because training a student can be a big commitment of the professor’s time and sometimes research money.

When you meet in person, you will want to ask things like, “What sort of research would you have me working on? Will I have set hours? How will I be evaluated?"  If you haven’t met them before, try to get a sense of whether their personality will work well with yours. (You can also get some sense of this if you have had them as a professor and from talking to other students.) If you’re working with them suits both you and the professor, have the professor sign a research-course permit.  Decide with the professor whether to take 1, 2 or 3 credits (depends on your needs and what project the professor has for you). If one professor does not have space or you cannot reach them, ask another.

# Where do I get the necessary course permit? from the biology main office, MO 349. It will need to be signed by the professor that you will be working with and then taken back to the main office. The first semester of research, everyone signs up under BIOS370. After that, again it will be BIOS370 unless you are in one or both of the Honors programs described on the next page.

# How many total credits of research can I do?

The maximum credits toward the bio major for BIOS 370, 490, 499, 495 combined is 9, with no more than 3 of those being from BIOS 490.

# What course number do I sign up for after my 1st semester of Bios 370? Our apologies for how complicated it is. We are working to fix it.

**1. If you are in neither the University Honors nor the Departmental Honors program**, take BIOS370.

**2. If you are in the** [NIU University Honors program](https://www.niu.edu/honors/), regardless of whether you are in the Departmental Honors program, take BIOS499 because it is automatically a University Honors class. The permit requires signatures both from the faculty member in whose lab you will be working and from the University Honors Program. Recently MyNIU has prevented students from taking more than one semester of BIOS 499, in which case just sign up under BIOS 495 or 370 (does not matter which), and ask the Honors program how to make it count as honors credit.

**3. If you are in just the Departmental Honors program and not the University Honors program**, take BIOS495. The permit requires signatures both from the faculty member in whose lab you will be working and from Professor Bethia King. Recently myNIU has prevented students from taking more than one semester of BIOS 495, in which case just sign up under BIOS 370.

# To graduate with Departmental Honors in BIOS:

Note that at NIU, [University Honors](https://www.niu.edu/honors/) and Departmental Honors are two separate things, but your Departmental Honors research project may double as a University Honors capstone project.

1. Complete at least 1 credit of BIOS370.
2. Preferably prior to signing up for your 2nd semester of research, email an unofficial copy of your transcript to Professor Bethia King [bking@niu.edu](mailto:bking@niu.edu) to demonstrate that you have the necessary [biosciGPA](#bioGPA) of at least 3.5, along with the name of the faculty member under whom you will be engaging in research.
3. Complete 6 additional credits (usually two semesters) –see above for what course number to use.
4. Maintain a cumulative [biosciGPA](#bioGPA) of at least 3.5 from your 2nd semester of research through graduation.
5. Present and explain the results of the honors project, e.g., at [NIU’s Conference on Undergraduate Research and Engagement](https://www.niu.edu/engaged-learning/conferences/undergraduate-research-engagement/index.shtml), which is in the spring.
6. At the end of your last semester, turn in a senior thesis on your research. The thesis should be in the format of a scientific paper and have the bio honors cover sheet (email [bking@niu.edu](mailto:bking@niu.edu) for a copy); but otherwise the format, length, etc., is up to your research advisor (the faculty member you did research with). A PDF of the thesis should be emailed to Professor Bethia King at [bking@niu.edu](mailto:bking@niu.edu), either through your advisor or with an email from your advisor indicating s/he approved the thesis. Alternatively, your advisor can sign a paper copy of the filled-in cover sheet, and you can scan that and use that as the first page of the PDF that you email to me.

# Undergraduate research opportunities that provide stipends

NIU tends to include these sorts of opportunities under [“Engaged learning” and “Experiential learning](https://www.niu.edu/engagedlearning/)”

**Any questions?** See Professor Bethia King (pronounced BETH’ ee uh), MO 446, [bking@niu.edu](mailto:bking@niu.edu).

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