

Welcome to Biology!

Please read this information carefully, as it will help you design your progress through the biology degree you've chosen.

Why Biology?

If you've chosen biology as the major to pursue, hopefully it is because you are passionate about this discipline. Completing a biology major will take a lot of effort and hard work and will involve not only courses in biology but also math, physics, chemistry, writing, speech and humanities and social sciences.

On average, to complete a biology degree in four years (regular semesters only) you would have to take 15-16 credits every semester. When you plan 2-3 hours of studying outside of class for every hour in class, you will have a very full agenda as a student! Of course, many students work and take fewer hours.

Many biology students are interested in professional school. Entry into professional programs (medicine, pharmacy, etc.) is very competitive, and no one can predict who will be accepted. Your major is your back-up plan for your post-graduation life, as well as your route to the professional school. You need NOT choose biology as your major, as professional schools generally pick their class from a variety of majors. Your major should be a discipline that reflects your interests and your abilities; one in which you can envision completing the curriculum and one which, if you do NOT gain entrance to the professional program, would be a satisfactory outcome for you.

Dean's Office

The Dean's Office (LD 222) is involved in academic issues at the School level. They enforce policies, make exceptions, approve students for graduation, assure that students continue in good academic status (or inform students of poor progress toward degree), etc. Here are some routine items they handle:

- **Change of major** – students moving into and out of biology; students changing from B.A. to B.S. or vice versa
- **Grade replacement** – School of Science students are allowed to replace up to 15 hours of grades. This means that if you do poorly in a course and retake that course, you may delete the first grade from the overall undergraduate GPA
- **Hold on schedule** – these are added to the student's record for various reasons. Some may require an advising meeting, some are for a financial encumbrance, some require a student to complete an immunization document, and some may prohibit a student from registering based on academic dismissal.
- **Senior audit and permission to register for CAND 991** – students approaching the end of their studies inform the Dean's Office of their plans

The Biology Curriculum

Comparing the B.A. and the B.S.

The Bachelor of Arts and the Bachelor of Science are both strong degrees. Students choose one over the other based on personal interests and possibly, future plans.

	Bachelor of Arts	Bachelor of Science
Credits required	124	124
Math	Algebra & Trig MA 153 & 154	Calculus MA 231/2, 221/2 or 165/6
Foreign Language	1 year equivalency	Not required
Biology Credits	30	40
Biology Labs	3 upper-level	4 upper-level
Organic Chem II Lab	Strongly recommended	Required

For the B.A. or B.S. degree you will need to complete

- ✓ 30 or 40 hours of biology coursework, respectively
- ✓ 5 lectures – one each from ecology, genetics, organismal, cellular and molecular areas
- ✓ 3 or 4 (respectively) upper-level (post K101 and K103) labs; in order to use a lab toward the degree the student must have the accompanying lecture
- ✓ Other science courses including physics, inorganic and organic chemistry
- ✓ Math, English composition, speech, and humanities and social sciences coursework
- ✓ Language proficiency requirements for the B.A.
- ✓ K490 (1 credit) or K493 (2 semesters, 1 credit each) plus K494 (1 credit) *more below*
- ✓ Electives to fill 124 applicable credits
 - These may come from the School of Science, the School of Liberal Arts, and other areas – feel free to ask if something will fulfill an elective

NOTE: Completing all the categories on the curriculum check sheet is necessary but NOT sufficient to complete the degree. Students will need extra electives to complete 124 credits, and B.S. students will need extra biology electives to reach 40 hours in that category.

The Capstone Experience

Every biology student completing a B.A. or B.S. is required to complete a capstone experience which is defined as “an independent, creative effort of the student that is integrative and builds on the student’s previous work in the major.” (IUPUI Bulletin 2006-2008, School of Science section, p. 489). Students in the B.A. curriculum complete K490 and students in the B.S. curriculum may complete K490 or K493/494.

K490

K490 is an independent library research project completed late in a student’s tenure. A student chooses a research topic based on her/his interest. The student should consult the listing of faculty areas of research/interest and approach the faculty member. The student and faculty member agree on the topic, length of paper, and criteria for grading. The student receives permission to register for the K490 through the main office (SL 306).

K493/494

K493/494 involves two semesters of research (493: 1 credit each semester) plus a thesis based on the research (494: 1 credit). A student interested in conducting undergraduate research will need to find a willing faculty member, commit to two semesters and devote a significant amount of time to lab work and ultimately, the written document (thesis) to accompany the research. This can be an extraordinary experience for a student, especially if the research leads to publication and/or presentation at a professional conference. Students heading to graduate school will find this experience invaluable as a precursor to research and thesis or dissertation.

You will also need

- 2.0 overall GPA to graduate
- 2.0 biology GPA; no biology grade lower than a C-
- No grade lower than a C- in outside science courses (one D+ or D allowed)
- No grade lower than a C- in math courses (one D+ or D allowed)
- To alert the Dean’s Office (LD 222) two semesters before graduation that you are planning to graduate. Ask for a senior audit.
- In your final semester to enroll for CAND 991, a no-credit “class” that has no meetings, but that keeps you in the graduation loop

Biology Main Office

The biology main office is located in SL 306. Professors’ mailboxes are located there, and this is the place to obtain permission for honors divisions for K101 and K103, permission to enroll in K490, 493, and graduate-level course registration. If you are interested in graduate programs in Biology check the graduate URL (<http://www.biology.iupui.edu/graduateinformation.html>) before contacting the main office for more information.

Placement Tests

When you begin your biology curriculum you should take placement tests unless you already have college-level coursework in that area. Placement tests assess where you stand in relation to courses offered at IUPUI. You should follow the recommended level of coursework; if you feel that you have tested too low, you will want to talk to the relevant department. Plan for tests in chemistry, math, and perhaps language.

Language tests

Language through the first-year proficiency is required for the B.A.; the B.S. does not have a language requirement although students may use language credits as electives. Proficiency is considered:

$$117 (3) \text{ and } 118 (3) \text{ and } 119 (4) = 10$$

OR

$$131 (5) \text{ and } 132 (5) = 10$$

If you test into the sequence you may finish the sequence and “buy” previous credits (\$20/credit). If you test into the 200-level or above you will be exempt from the language requirement, but you must still fulfill the 124 credits required by the degree, so in essence these 10 credits become electives.

To purchase previous language credits after completing the required course/s see World Languages and Cultures area in CA 545 (274.0062).

Transfer Credits

If you are a transfer student your coursework will be evaluated by Admissions. Many science/math/psychology courses will need further evaluation by others.

Take Biology course descriptions to the Biology advisor who will forward them to the department head for review.

Chemistry courses
Chemistry
Ms. Marie Nguyen
LD 326X
nguyen@chem.iupui.edu
274.6894

Computer science courses
Computer & Information Science
Mr. Josh Morrison
SL 280N
Morrison@cs.iupui.edu
274.2724
Math Courses
Mathematical Sciences

Ms. Andrea Brian
LD 270B
abrian@math.iupui.edu
278.4127

Physics courses
Physics department
LD 154

Psychology courses
Ms. Cindy Williams
LD 126B
cyclark@iupui.edu
278.2237

You may have to check other coursework including English composition, humanities, social science and language classes. These may require visits to those departments or to the School of Science Dean's Office to see Dr. Gavrin. Your advisor will direct you to these resources.

It's Your Responsibility!

Your academic advisor and many others at IUPUI are interested in your success. We welcome you to consult about questions you have and we will do our best to help you make good, informed choices. However, the ultimate responsibility for meeting requirements (courses, GPA standards, deadlines, etc.) lies with you.

When choosing courses please consider course descriptions (available on Registrar's homepage) and whether you meet prerequisite criteria. If you choose courses for which you do not have prerequisites, you are likely not to do well. Waiving prerequisites is at the discretion of the instructor, not your academic advisor.

The IUPUI bulletin states:

Each student should understand that the responsibility for determining an appropriate academic program and for meeting every degree requirement rests with the student; faculty or staff members acting in the capacity of advisors are obligated only to assist students in meeting this responsibility. (IUPUI Bulletin 2006-2008; School of Science, p. 487)

Registering for Classes

You will register for classes via the student system; you may also do drop/adds here. Each semester a window of eligibility to register will be posted in your student record. Likewise, other important information will be noted here.

Before registering you should check prerequisites and semesters in which courses are offered. Please also be aware of drop/add deadlines!

Sources for Information

An excellent source for a lot of basic information is in the files beside the advising office where you'll find curricula, descriptions of K490, 493 and 494, information about professional and graduate school, forms for permission to enroll in restricted classes, and more! In addition, check the bulletin board across the hall from SL322 for advising information, and peruse bulletin boards all over the SL and LD buildings for job postings, information about events, student organization happenings, etc.

Enhance Your Experience

There are many opportunities at an institution like IUPUI. We encourage you to participate as your interest, background/skill and time allow.

Biology club/other student organizations

An umbrella organization for the Department of Biology students, the Biology Club provides information via a listserv and sponsors a number of events. See the Biology Club bulletin board next to the main office (SL 306) to find out how to join the listserv.

Other student organizations will offer callouts and disseminate information via the Biology Club listserv. Participating in one or more student organizations will strengthen your undergraduate experience.

Honors Program

The honors program at IUPUI provides an opportunity for academically talented and motivated students to accelerate their learning. Students may be admitted directly from high school or may apply to the program after establishing the required GPA. Students complete honors credits and research. Students who complete the requirements receive a general honors notation on their transcript.

<http://uc.iupui.edu/honors/>

Life-Health Science Internships

The Life-Health Science Internships allow biology (and other) students to engage in research with faculty and staff members on and near the IUPUI campus. Internships are designed to take place in the sophomore or junior year, and are one academic year in length. For more details and application information see

<http://medicine.iu.edu/body.cfm?id=1838>

Undergraduate Research Opportunities Program (UROP)

Students interested in research may elect to pursue the transcript notation through the UROP program. Participating students enroll in research credits, prepare a written document, attend research events, prepare a research portfolio, and present their findings. <http://www.urop.iupui.edu/transcript.html>

Important Contacts

Admissions (transcript inquiries)
317.274.4591
Campus Center

Financial Aid
317.274.162
Campus Center

Information Technology
317.274.4357
Informatics Building – first floor

Placement tests (call Orientation)
317.274.4240

Registration help line
317.274.1519
240 Campus Center

World Languages and Cultures
274.0062
CA 545

Important URLs

Adaptive Educational Services - <http://www.iupui.edu/~divrsity/aes/about/>

Ask a Librarian - <http://www.ulib.iupui.edu/research/askalibrarian>

Biology K101/K103 Help Sessions – hours vary from semester to semester; check postings

Campus Parking and Shuttles -
<http://www.parking.iupui.edu/google.maps/transportation.maps.do>

Counseling and Psychological Services - <http://life.iupui.edu/caps/counseling.html>

Courses:

Descriptions - <https://www.iu.edu/~registra/course-descriptions/>

Offerings - <http://registrar.iupui.edu/schedule.htm>

Special Courses - <http://registrar.iupui.edu/splashcln.htm>

Financial Aid - <http://www.iupui.edu/~finaid/>

IUPUI Contacts - <http://www.iupui.edu/people.htm>

IUPUI Events - <http://events.iupui.edu/>

Registrar - <http://registrar.iupui.edu/>

School of Science:

Bulletin - <http://bulletin.iupui.edu/2006/pdf/science06.pdf>

Chemistry Resource Center –

Math Resource Center - <http://www.math.iupui.edu/MAC/>

TCM Writing Center - <http://www.engr.iupui.edu/tcm/ftcmwchandoutpolish.shtml>

Test-Taking Techniques/Strategies - <http://uc.iupui.edu/learningcenter/tests.asp>

University Writing Center - <http://www.iupui.edu/~uwc/links.html>