

BIOLOGICAL SCIENCES MAJOR (119) WORKSHEET
DIVISION OF LIFE SCIENCES – FACULTY OF ARTS AND SCIENCES

NAME _____ ID NUMBER _____

This worksheet outlines the requirements for majoring in Biological Sciences. It is your responsibility to keep track of your progress towards the completion of the major by updating this worksheet as you complete the required courses. Although we believe that this worksheet clearly delineates the requirements of the Biological Sciences major, we urge you to contact us (**Office of Undergraduate Instruction, Room B-112, Nelson Biological Laboratories; 732-445-2075; advising@biology.rutgers.edu**) should you have any questions about this document. Please keep in mind that this is the document that we will review prior to your graduation in order to determine whether or not you have fulfilled the requirements of the major. We expect that you will contact our office, in person or by email, **at least once each year** (we strongly recommend once each semester) to make sure that you are on track to meet these requirements before graduation. Once you have come to this office to declare Biological Sciences as your intended major, we will add your name to the database of our majors. This will automatically create an electronic version of the "major worksheet" for you, allowing us to follow your progress. Using your Eden username and password, along with your RUID, you also may access our database to review your own record (<http://biology.rutgers.edu>). Click on the "Review Your MAJOR Progress" link under Popular Links). This will give you the opportunity to review our record of the progress you have made towards the major. Furthermore, this will allow you to inform us if you believe that our record is incomplete or if it contains an error. Please keep in mind that all these steps are intended to minimize the chance that you might end up in the last semester of your senior year, being informed that you have not met all of your requirements for the major!

A. NON-LIFE SCIENCE CORE COURSES (35 CR):

	COURSE #	CREDITS	GRADE
GENERAL CHEMISTRY	01:160:161 (or 163)	4	_____
	01:160:162 (or 164)	4	_____
	01:160:171	1	_____
ORGANIC CHEMISTRY	01:160:307 (or 315)	4	_____
	01:160:308 (or 316)	4	_____
	01:160:311	2	_____
CALCULUS*	01:640:135	4	_____
	01:640:138	4	_____

* 640:151-152 or 640:135-136 may also be used to satisfy the Calculus requirement. Second semester of calculus may be substituted for by 960:379 or 960:401.

GENERAL PHYSICS*	01:750:203	3	_____
	01:750:204	3	_____
	01:750:205	1	_____
	01:750:206	1	_____

* 750:203-204 (3,3) plus 750:205-206 (1,1) may be replaced by 750:193-194 (4,4) or 750:201-202 (5,5).

B. LIFE SCIENCE CORE COURSES (14 CR):

GENERAL BIOLOGY	01:119:115	4	_____
	01:119:116	4	_____
	01:119:117	2	_____
GENETICS*	01:447:380	4	_____

*11:776:305 may also be used satisfy the Genetics requirement.

C. LIFE SCIENCE ELECTIVE COURSES (24 CR)*:

COURSE NAME	COURSE#	CREDITS	GRADE
1. _____	01:146: _____	_____	_____
2. _____	01:447: _____	_____	_____
3. _____	01:694: _____	_____	_____
OR			
4. _____	11:115: _____	_____	_____
5. _____	11:704: _____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

Total Life Science Elective Course Credits Earned: _____

*A minimum of 6 courses (18 credits) in the “Life Science Elective Courses” category must be at the **300-400 level**, including at least 3 separate **laboratory** courses or 3 courses with a lab component. This means that no more than 6 credits at the 200-level can be applied to the “Life Science Elective Courses” category.

*The 1-credit lab (447:382) associated with Genetics (447:380), if taken, maybe used to satisfy one of the 3 lab requirements in the “Life Science Elective Courses” category.

*The elective courses must include at least one 3-credit course each from the Cell Biology and Neuroscience **146**, Genetics and Microbiology **447**, Molecular Biology and Biochemistry **694**, and Natural Resource Management **704** subject areas. Until further notice, the 694 requirement may be met by taking a 3-credit **11:115:XXX** course. The “subject area” requirement cannot be fulfilled with “Independent Study/Research/Honors” courses.

*A maximum of 6 credits of **Independent Study/Research/Honors** may be used towards the 24 elective credits. Only “Research/Honors” at the 300-400 level, regardless of the number of credits, may be used to fulfill 1 of the 3 lab requirements. Independent Study (work not involving laboratory research) credits at the 200-level will not satisfy a lab requirement.

***Independent Study/Research** – Students majoring in Biological Sciences wishing to do independent study or research in a professor’s lab are expected to enroll in Independent Study in Biology (**119:201 or 202**), Research in Biology (**119:307, 308, 406, or 407**) or Honors in Biology (**119:408,409**). A form (available on the web) needs to be completed by the student and approved by the Office of Undergraduate Instruction, **PRIOR** to registering for any of these courses. Failure to obtain prior approval may jeopardize the student’s ability to apply the credits towards the Biological Sciences major.

*Grade and average requirements: A **2.0 GPA** must be maintained in the **Life Science “Core and Elective courses”** (sections B and C above) applied towards the major. No more than **two** courses with a **grade of D** may be used to fulfill the requirements of the major (sections A, B, and C above). If you earn more than 2 grades of D, your options are to either repeat one or more of the courses with the D grade or take new courses to be applied towards the major. In the latter case, the extra courses with a D grade will count towards graduation, but will be ignored in terms of the major requirements.

***Residency requirements for the major:** A minimum of 20 credits from among the **Life Science “Core and Elective courses”** (sections B and C above) must be completed at Rutgers-New Brunswick. Therefore, no more than 16 credits may be transferred from any school outside of Rutgers-NB. The residency rule does not apply to the 35 credits of chemistry, physics and math courses required for the major (section A above).

*A list (available on the web) of approved courses in subject areas in addition to those in the Division of Life Sciences is published by the Division’s Advising Office. It is strongly recommended that students consult this list before registering for courses. You can pick up the list from Room B-112 or you may print it by going to <http://biology.rutgers.edu/biological-sciences/courses#nonDLS>

***No course at the 100 level may be used to satisfy the Life Science Electives requirements.**

*Courses taken on a **P/NP** (pass/fail) basis and courses with **non-traditional** formats (e.g. Online and Winter Session courses), whether offered by Rutgers or another university, may not be used to satisfy any of the major requirements.

*Cook College students should note that **Cooperative Education** credits may not be used to satisfy any of the major requirements. In some instances, however, Cook College may accept a course that is being applied towards the “Biological Sciences” major, in fulfillment of the college’s “Experienced-Based Education” requirement. The most likely example is an “Independent Study/Research in Biology” course. Whenever in doubt, please contact the Office of Undergraduate Instruction.

*The following are five ways to keep in touch with us and stay informed about the Biological Sciences major:

1. **Office of Undergraduate Instruction (Nelson Labs., Room B-112, Busch campus)**
2. **Telephone number: 732-445-2075**
3. **Email: advising@biology.rutgers.edu**
4. **Web page: <http://biology.rutgers.edu/>**
5. **Online database of majors: <http://biology.rutgers.edu/review-your-major-progress>**