

Life Sciences First Year (17LSFY)

Semester Display Effective Date: 6.2014

FRESHMAN YEAR				
Fall Semester	Credit		Spring Semester	Credit
LSC 101 Critical Creative Thinking Life Sci	2		ENG 101 Academic Writing & Rsch	4
LSC 103 Exploring Opportunities Life Sci ¹	1		BIO 183 Intro Bio: Cell & Molecular	4
BIO 181 Intro Bio: Ecol, Evol, Biodiversity	4		Chemistry and Lab ²	4
Chemistry and Lab ²	4		Calculus ³	3-4
Calculus ³	3-4			
GEP Health & Exercise Studies	1			15-16
	15-16			

Footnotes:

General Notes:

- Students entering NC State with credit for college courses will work with an advisor to determine appropriate course choices based on their interests and program requirements.
- All students are required to take online placement exams in chemistry and math before they finalize their first-semester schedules.
- Minimum requirements to be eligible for any degree program in the life sciences are C- or better grades in LSC 101, BIO 181, BIO 183, CH 101, and ENG 101. An overall GPA of 2.0 or better is required for continued enrollment at NC State.

1. Exploring Opportunities in the Life Sciences

Students can choose a section that explores a single area within the life sciences in more depth--examples include BCH 103, MB 103, and PB 103--or students can choose a section (LSC 103) that will allow them to explore a wider variety of degree programs within the life sciences. All sections of 103 will also address transition issues common to many first-semester college students as well as resources and opportunities available at NC State.

2. Chemistry

- Chemistry Placement: Students who do not place into CH 101 or more advanced chemistry should try to complete preparatory coursework (CH 111 or equivalent) in the summer.
- First Semester: Life science students take CH 101 and CH 102 to start their required coursework in chemistry, but those interested in pursuing chemistry, biochemistry, or chemical engineering will want to select the appropriate section of CH 101--these students should consult with an advisor to select the appropriate section.
- Second Semester: Students should work with their advisor and/or the Undergraduate Coordinator(s) in their major(s) of interest to decide on the appropriate chemistry course to take during their second semester. Some will want to take quantitative chemistry (CH 201/202) and some will want to start organic chemistry. Degree programs in the life sciences at NC State typically require two semesters of organic chemistry (CH 221/222 and CH 223/224), but there are exceptions. The following require only one semester of organic chemistry (CH 220 or CH 221/222): Environmental Sciences and Marine Science Biological Oceanography. NOTE: CH 220 is not a replacement for CH 221 and does not serve as a pre-requisite for CH 223.

3. Calculus

Most NC State majors in life sciences require MA 131 and MA 231, but some students (particularly those interested in Biochemistry and some aspects of Environmental Science) may wish to pursue the three semester sequence instead (MA 141, MA 241, and MA 242). Two life science majors (Nutrition Science and Plant Biology) and some related majors require only one semester of calculus, and therefore accept MA 121 in place of MA 131. However, MA 121 cannot be used as a prerequisite for MA 231, so you should not take that option unless you are absolutely sure you will not want or need to take a second semester of calculus.

Student who decide not to take a second semester of calculus should work with their advisor and/or the Undergraduate Coordinator(s)

in their major(s) of interest to decide on an appropriate course to take during their second semester instead of calculus.

Students who place into a pre-calculus course should try to complete preparatory coursework (MA 107 or equivalent) in the summer.

4. *ENG 101 and the General Education Program (GEP)*

All NC State students take 39 credit hours as part of the General Education Program (GEP). For students in the life sciences, 15 of those credit hours are met by major requirements. The remaining 24 GEP credit hours include ENG 101, which can be taken either the first or second semester of the first year. Any students taking an additional GEP Elective in the first year are encouraged to explore First Year Inquiry (http://www.ncsu.edu/firstyearinquiry/current_courses.htm) and the GEP course lists (<http://oucc.ncsu.edu/gep-reqs>) for Humanities or Social Sciences or Interdisciplinary Perspectives for courses of interest.

General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.dasa.ncsu.edu/general-education-program/>.

Introduction to Writing: ENG 101 (4 credit hours with a C- or better)

Some students will enroll in ENG 101 in the fall semester of Freshman year and others will enroll in ENG 101 in the spring semester of Freshman year.

Mathematical Sciences (6 credit hours-one course with MA or ST prefix)

In all life sciences curricula, this GEP requirement is met through Major course requirements.

Natural Sciences (7 credit hours-include one laboratory course or course with a lab)

In all life sciences curricula, this GEP requirement is met through Major course requirements.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list. Some courses on this list will also meet the U.S. Diversity or Global Knowledge co-requisites.

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Social Sciences course list. Some courses on this list will also meet the U.S. Diversity or Global Knowledge co-requisites.

Physical Education/Healthy Living (2 credit hours-at least one 100-level Fitness and Wellness Course)

Choose from the University approved GEP Physical Education/Healthy Living course list.

Additional Breadth (3 credit hours)

Choose from the University approved GEP Humanities course list or the GEP Social Sciences course list or the GEP Visual & Performing Arts course list. Some courses on this list will also meet the U.S. Diversity or Global Knowledge co-requisites.

Interdisciplinary Perspectives (5 credit hours)

In all life sciences curricula, at least two credit hours of this GEP requirement are met by LSC 101.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

U.S. Diversity (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.

Global Knowledge (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.

Foreign Language Proficiency-Proficiency at the FL_102 level is required for graduation.