Environmental First Year Program

The Environmental First Year (ENVFY) Program is an undeclared major option. Growing numbers of entering students arrive at NC State with strong interest in the environment and sustainability but undecided about a particular major. The Environmental First Year (ENVFY) Program provides a framework that raises the visibility of environmental programs at the University and the fertile ground necessary for first-year students to make a smooth transition into an appropriate major.

Plan Requirements

Code	Title	Hours
MAJOR FIELD OF STUDY REQUIREMENTS		
College Requirements		
ENV 100	Student Success in Environmental First Year	1
ENV 101	Exploring the Environment	2
Calculus		
MA 131	Calculus for Life and Management Sciences A	3
or MA 141	Calculus I	
MA 231	Calculus for Life and Management Sciences B	3
or MA 241	Calculus II	
Natural Sciences		
BIO 181	Introductory Biology: Ecology, Evolution, and Biodiversity	4
BIO 183	Introductory Biology: Cellular and Molecular Biology	4
CH 101 & CH 102	Chemistry - A Molecular Science and General Chemistry Laboratory	4
CH 201 & CH 202	Chemistry - A Quantitative Science and Quantitative Chemistry Laboratory	4
or CH 221 & CH 222	Organic Chemistry I and Organic Chemistry I Lab	
GEP Courses		
ENG 101	Academic Writing and Research	4
GEP Humanities (https://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		6
GEP Social Sciences (https://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-social-sciences/)		6
GEP US Diversity, Equity, and Inclusion (https://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-usdei/)		3
GEP Interdisciplinary Perspectives (https://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-interdisciplinary-perspectives/)		5
GEP Health and Exercise Studies (https://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		2
Total Hours		**51**

* Depending on intended major

First Year		
Fall Semester		**Hours**
ENV 101	Exploring the Environment [2]	2
ENV 100	Student Success in Environmental First Year [1]	1
Calculus [4]		3-4
MA 131	Calculus for Life and Management Sciences A	
MA 141	Calculus I	
BIO 181	Introductory Biology: Ecology, Evolution, and Biodiversity	4
Chemistry and Lab [3]		4
CH 101 & CH 102	Chemistry - A Molecular Science and General Chemistry Laboratory [3]	
GEP Health and Exercise Studies (https://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/) [5]		1
	Hours	**15**
Spring Semester		
BIO 183	Introductory Biology: Cellular and Molecular Biology	4
Chemistry and Chemistry Lab [3]		4
CH 201 & CH 202	Chemistry - A Quantitative Science and Quantitative Chemistry Laboratory	
CH 221 & CH 222	Organic Chemistry I and Organic Chemistry I Lab	
ENG 101	Academic Writing and Research	4
Calculus [4]		3-4
MA 231	Calculus for Life and Management Sciences B	
MA 241	Calculus II	
GEP Health and Exercise Studies (https://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		1
	Hours	**16**
	Total Hours	**31**

[1] Student Success Course: All Environmental First Year Students will take ENV 100: Student Success in the Environment in their first semester.

[2] Foundational Depth and Exploration Course
All students will take ENV 101 in their first semester. This 2 credit course covers breadth of environmental problems through a series of case studies led by faculty from various programs, and emphasizes critical and creative thinking through hands-on activities, field trips, and service learning projects to encourage the development of problem-solving skills. This course also meets the 2cr. Interdisciplinary Perspective GEP requirement.

[3] Chemistry:
Chemistry Placement: Students who do not place into CH 101 (https://catalog.ncsu.edu/search/?P=CH%20101) Chemistry - A Molecular Science or more advanced chemistry should try to complete preparatory coursework (CH 111 (https://catalog.ncsu.edu/search/?P=CH%20111) Preparatory Chemistry or equivalent) in the summer prior to their freshman year.
First Semester: students take CH 101 (https://catalog.ncsu.edu/search/?P=CH%20101) Chemistry - A Molecular Science and CH 102

(https://catalog.ncsu.edu/search/?P=CH%20102) General Chemistry Laboratory to start their required coursework in chemistry, but those interested in pursuing chemistry, biochemistry, or chemical engineering will want to consider CH 103 (https://catalog.ncsu.edu/search/?P=CH%20103) General Chemistry I for Students in Chemical Sciences and CH 104 (https://catalog.ncsu.edu/search/?P=CH%20104) General Chemistry Laboratory I for Students in Chemical Sciences instead– these students should consult with an advisor to select the appropriate chemistry course.

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 (https://catalog.ncsu.edu/search/?P=CH%20201) Chemistry - A Quantitative Science/CH 202 (https://catalog.ncsu.edu/search/?P=CH%20202) Quantitative Chemistry Laboratory) 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 (https://catalog.ncsu.edu/search/?P=CH%20221) Organic Chemistry I/CH 222 (https://catalog.ncsu.edu/search/?P=CH%20222) Organic Chemistry I Lab and CH 223 (https://catalog.ncsu.edu/search/?P=CH%20223) Organic Chemistry II/CH 224 (https://catalog.ncsu.edu/search/?P=CH%20224) Organic Chemistry II Lab), but there are exceptions. The following require only one semester of organic chemistry (CH 220 (https://catalog.ncsu.edu/search/?P=CH%20220) Introductory Organic Chemistry or CH 221 (https://catalog.ncsu.edu/search/?P=CH%20221) Organic Chemistry I/CH 222 (https://catalog.ncsu.edu/search/?P=CH%20222) Organic Chemistry I Lab): Environmental Sciences and Marine Science Biological Oceanography. Note: CH 220 (https://catalog.ncsu.edu/search/?P=CH%20220) Introductory Organic Chemistry is not a replacement for CH 221 (https://catalog.ncsu.edu/search/?P=CH%20221) Organic Chemistry I and does not serve as a prerequisite for CH 223 (https://catalog.ncsu.edu/search/?P=CH%20223) Organic Chemistry II.

[4] Calculus: Most NC State majors in life sciences require MA 131 (https://catalog.ncsu.edu/search/?P=MA%20131) Calculus for Life and Management Sciences A and MA 231 (https://catalog.ncsu.edu/search/?P=MA%20231) Calculus for Life and Management Sciences B, 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 (https://catalog.ncsu.edu/search/?P=MA%20141) Calculus I, MA 241 (https://catalog.ncsu.edu/search/?P=MA%20241) Calculus II, and MA 242 (https://catalog.ncsu.edu/search/?P=MA%20242) Calculus III). Three life science majors (Nutrition Science, Plant Biology, and the BA in Biological Sciences) and some related majors require only one semester of calculus, and therefore accept MA 121 (https://catalog.ncsu.edu/search/?P=MA%20121) Elements of Calculus in place of MA 131 (https://catalog.ncsu.edu/search/?P=MA%20131) Calculus for Life and Management Sciences A. However, MA 121 (https://catalog.ncsu.edu/search/?P=MA%20121) Elements of Calculus cannot be used as a prerequisite for MA 231 (https://catalog.ncsu.edu/search/?P=MA%20231) Calculus for Life and Management Sciences B, 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.

Students 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 (https://catalog.ncsu.edu/search/?P=MA%20107) Precalculus I or equivalent) in the summer.

[5] ENG101 and the General Education Program: 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 (https://catalog.ncsu.edu/search/?P=ENG%20101) Academic Writing and Research, 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.dasa.ncsu.edu/general-education-program/) for Humanities or Social Sciences or Interdisciplinary Perspectives for courses of interest.