

## B. S. in Biology Agricultural Science Emphasis 2024-2025

Freshman Year 2024-2025						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
UNV 1000	Freshman Seminar	1		ENG 1060	Composition II	3
ENG 1050	Composition 1	3		BIO 1010 or BIO 1020	General Botany or General Zoology	4
MAT 1070 or MAT 1090	College Algebra or Precalculus	3 or 4		CHM 1300	General Chemistry	3
BIO 1000*	Principles of Biology	3		CHM 1100	General Chemistry Laboratory I	1
BIOL 1000	Biology Laboratory	1		ENV 2450 (odd springs only)	Principles of Sustainable Agriculture	4
General Education	Fine Arts	3				
<b>Total Credits</b>			14-15	<b>Total Credits</b>		

Sophomore Year 2025-2026						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
General Education	Literature	3		MAT 2100	Introduction to Statistics	3
CHM 1310	General Chemistry II	3		ENV3250 (even springs only)	Cropping and Weed Management	3
CHM 1110	General Chemistry Laboratory II	1		BIO 1010 or BIO 1020	General Botany or General Zoology	4
Agricultural Science Elective**		3-4		General Education	History	3
BIO 1040 (odd falls only)	Introduction to Animal Science	3		University Wide Electives ***		3
General Education	Physical Education	1				
<b>Total Credits</b>			14-15	<b>Total Credits</b>		

Junior Year 2026-2027						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
University Wide Electives***		3		ENV 3200 (odd springs only)	Soils and Hydrology	4
ENV 4200 (even falls only)	Pest Management	4		BIO 3040	Principles of Ecology	4
Agricultural Science Elective**		3-4		University Wide Electives***		3
BIO 4700 (WD)	Reading/Writing in the Natural Sciences	3		General Education	Social Science	3
General Education	Physical Education	1		General Education	Philosophy and Religion	3
<b>Total Credits</b>			14-15	<b>Total Credits</b>		

Senior Year 2027-2028						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
BIO 4010	Agriculture Internship	3		General Education	Elective	3
BIO 2180	Principles of Genetics	4		General Education	Social Science	3
University Wide Electives***		3		Agricultural Science Elective**		3-4
University Wide Electives***		3		University Wide Electives***		3
University Wide Electives***		3		University Wide Electives***		3
<b>Total Credits</b>			16	<b>Total Credits</b>		

**\*\*Approved Agricultural Science Electives Arranged by Areas of Interest** (areas of interest are optional groupings):

Students may take any of the courses from the list below, but we recommend that students consider adopting one of the Areas of Interest outlined below and take elective courses accordingly. Many courses are only offered every other year and in spring OR fall. All students should review the Biology Course Offerings webpage to see availability:

<https://www.uncp.edu/departments/biology/undergraduate-programs/courses/bio-undergraduate-course-offerings>.

- **Area of interest – Animal Husbandry**  
BIO 3190 Animal Parasitology (4), BIO 2410 Animal Nutrition (3), BTEC 4300 Principles of Medical Biotechnology (3), BIO 2060 Animal Reproductive Physiology (4)
- **Area of interest – Plant Cropping**  
BIO 3540 Plant Physiology (4), BIO 3010 Entomology (4), BIO 2010 Techniques in Horticulture (4), BIO 2020 Tropical Horticulture (3)
- **Area of interest – Niche Farming**  
BIO 2080 Introductory Mycology (4), BIO 2420 Beekeeping (3), BIO 3020 Greenhouse Crop Production and Management (4), BIO 2020 Tropical Horticulture (3)
- **Area of interest – Food Systems**  
ENV 4100 Environmental Laws and Regulations (3), ECN 3080 Environmental Economics (3), SOC 2090 Food Inequality and Social Justice (3)
- **Area of interest – Sustainable Agriculture**  
BIO 3420 Pollution Ecology (3), BIO 4320 Conservation Biology (4), BIO 4510 Small Farm Systems (4), ENV 3100 Freshwater Ecosystems and Watershed Management (4)
- **Area of interest – Agricultural Technology**  
GLY 2700 Intro to GIS (4), GLY 4040 Remote Sensing (3), GLY 2620 Environmental Geology (3), GLY 2460 Weather and Climate (3)

**\*\*\* Students with an interest in entrepreneurship or small business are encouraged to use some of their university electives to obtain an Entrepreneurship Certificate. The following courses are required for this certificate: ENTR 2000, ENTR 2100, ENTR 4000**

#### **ALL GENERAL EDUCATION COURSES CAN BE INTERCHANGED**

\*C or higher is required in BIO 1000 to matriculate to other BIO Courses in the major

QPA Requirements for Baccalaureate Graduation: "Have a minimum overall cumulative quality point average of 2.0 and have a minimum cumulative quality point average of 2.0 in all work attempted at the University of North Carolina at Pembroke; Have a minimum overall cumulative quality point average of 2.0 in the major field of study"