SPECIALTY AGRICULTURE, B.S.

Specialty Agriculture

Specialty Agriculture in this context refers to sustainable, high-yield agriculture that can be economically sustainable in mountainous regions and small land areas. The Bachelor of Science in Specialty Agriculture provides educational opportunities in agriculture, agribusiness, and agrotourism, covering both traditional and sustainable agricultural sciences. New and emerging technologies for high yield and specialty agriculture are emphasized, as they will improve agribusiness outcomes for smaller farms that are characteristic of the region. Focus of the major includes, but is not limited to, the agricultural aspects of greenhouse production, hydroponics, precision farming, urban agriculture, community gardens, and specialty crop production.

- General Education Course

- Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at https://www.marshall.edu/gened/.

Course Requirements

Code	Title	Credit Hours
Core Curriculum		
Core 1: Critical Thinking		
FYS 100	First Yr Sem Critical Thinking	3
Critical Thinking Courses		6
NRE 120	Discussions in Envrion Science	
NRE 220	Human Dimensions of Nat Res	
Core 2		
ENG 101	Beginning Composition	3
ENG 201	Advanced Composition	3
CMM 103	Fund Speech-Communication	3
Core II Math: Select one of the following:		3-5
MTH 140	Applied Calculus	
MTH 229	Calculus/Analytic Geom I (CT)	
Core II Humanities		3
Core II Social Science		3
GEO 222	Global Environment Issues (CT) (recommended)	
Core II Fine Arts		3
Core II Physical/Natural Science		4
BSC 120	Principles of Biology I	
BSC 120L	Principles of Biology I Lab	
Additional University Requirements		
Writing Intensive		3
GEO 222	Global Environment Issues (CT) (recommended)	
Writing Intensive		3
Multicultural or International		3
GEO 222	Global Environment Issues (CT) (recommended)	
Capstone		3
NRE 470	ES Internship	
or NRE 491	ES Senior Capstone	
Department Requirements		
CIT 150	Spreadsheet and Database Apps	3
Select one of the following:		3-5
MTH 140	Applied Calculus	
MTH 229	Calculus/Analytic Geom I (CT)	
NRE 120	Discussions in Envrion Science	3
NRE 220	Human Dimensions of Nat Res	3
NRE 490	ES/NRRM Capstone Prep	3
NRE 470	ES Internship	3
or NRE 491	ES Senior Capstone	
NRRM 200	Analytical Methods: Statistics	4
Major-Specific Requirements		
BSC 120	Principles of Biology I	3
BSC 120L	Principles of Biology I Lab	1
BSC 121	Principles of Biology II	3
BSC 121L	Prin of Biology II Lab	1
CHM 211	Principles of Chemistry I	3
CHM 212	Principles Chemistry II	3
CHM 217	Principles of Chem Lab I	2
CHM 218	Principles of Chem Lab II	2
ENT 250	Intro to Entrepreneurship	3
MGT 320	Principles of Management	3
NRE 200	Introduction to Agriculture	3
NRE 300	Principles of Soil Science	3
NRE 301	Principles of Soil Science Lab	2
NRE 302	Animal Production	3
NRE 322	Assess I: Terrestrial Systems	4
NRE 323	Assessment II: Aquatic Ecology	4
NRE 401	Horticulture	4
NRE 402	Sustainable Agriculture	3
NRE 403	Agricultural Entomology	4
Major-Specific Electives		**14-16**

In consultation with the NRE/COS advisors, students will select electives from Marshall University offerings best suited to prepare students for future endeavors. Students interested in specific fields or professional credentials, such as nutrient management, outreach and education, ecotourism, agriculture commodities broker, soil science, soil health, food security, livestock production, or crop production, should speak with their NRE faculty advisor to discuss electives. The student will select electives to reach 120 credit hours required for graduation. Additional electives may be used to satisfy general education requirements (e.g., writing intensive). A minimum of 40 hours must be 300-400 level courses. Below is a list of courses that could be considered; however, the list is not exhaustive and other courses can be considered based on consultation between the student and NRE/COS advisors.

BSC 302	Principles of Microbiology
BSC 320	Principles of Ecology
BSC 322	Principles Cell Biology
BSC 324	Principles of Genetics
BSC 401	Ichthyology
BSC 408	Ornithology
BSC 409	Mammalogy
BSC 416	Plant Taxonomy
BSC 420	Plant Physiology
BSC 422	Animal Physiology
BSC 424	Animal Parasitology
BSC 430	Plant Ecology
BSC 445	Microbial Ecology
CI 248	Intro to Science Elem Ed
DTS 202	Introductory Foods
DTS 210	Nutrition
DTS 301	FS Safety & Systems Mgt I
DTS 302	FS Safety & Sys Mgt II
DTS 410	Cross Cultural Foods
EDF 201	Ed Psych Developing Learner
GEO 101	Physical Geography (CT)
GEO 222	Global Environment Issues (CT)
GLY 200	The Dynamic Earth
GLY 210L	Earth Materials Lab
HST 390	Food in World History
GLY 314	Mineralogy
GLY 451	Principles Geomorphology
GLY 456	Environmental Geology
GLY 455	Hydrogeology
GLY 455L	Hydrogeology Laboratory
HST 392	Food and the City Since 1800
MKT 231	Principles of Selling
MKT 340	MKT Concepts and Applications
NRE 400	Soil Fertility/Plant Nutrition
NRE 423	GIS and Data Systems
NRE 425	Water Policy and Regulations
NRRM 231	Nature Study
NRRM 310	Environmental Interpretation
NRRM 311	Intro to Environmental Educ
NRRM 360	Tourism Planning & Management
NRRM 362	Ecotourism: Admin and Mgmt

Major Information

- **Capstone Experience:** It is the responsibility of each student to consult his/her advisor regarding details of meeting the capstone requirement. The Capstone for this degree is completed in the summer.
- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.
- Coursework listed as "elective" may vary for each student. Students are encouraged to use elective hours toward a minor or toward prerequisites.
- Students are strongly encouraged to select courses that meet two or more Core or College requirements. For example, a writing intensive literature course could satisfy the Core II Humanities requirement as well as the university writing intensive requirement.
- Course offerings and course attributes are subject to change each semester. Please consult each semester's schedule of courses for availability and attributes.
- Minimum 2.0 overall and MU and in all NRRM coursework required for graduation.
- Minimum of 120 hours (40 upper level) required for graduation.

- General Education Course

- Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

Semester Plan

First Year

First Semester		**Credit Hours**
CIT 150	Spreadsheet and Database Apps	3
NRE 120	Discussions in Envrion Science	3
MTH 140	Applied Calculus	3
ENG 101	Beginning Composition	3
FYS 100	First Yr Sem Critical Thinking	3
UNI 100	Freshman First Class	1
	Credit Hours	**16**
Second Semester		
ENG 201	Advanced Composition	3
CMM 103	Fund Speech-Communication	3
BSC 120	Principles of Biology I	3
BSC 120L	Principles of Biology I Lab	1
GEO 222	Global Environment Issues (CT) (WI)	3
NRE 220	Human Dimensions of Nat Res	3
	Credit Hours	**16**

Second Year

First Semester		
CHM 211	Principles of Chemistry I	3
CHM 217	Principles of Chem Lab I	2
Core II Humanities (WI)		3
Core II Fine Arts		3

NRE 200	Introduction to Agriculture	3
	Credit Hours	**14**
Second Semester		
BSC 121	Principles of Biology II	3
BSC 121L	Prin of Biology II Lab	1
CHM 212	Principles Chemistry II	3
CHM 218	Principles of Chem Lab II	2
NRRM 200	Analytical Methods: Statistics	4
NRE 302	Animal Production	3
	Credit Hours	**16**
Third Year		
First Semester		
NRE 323	Assessment II: Aquatic Ecology	4
NRE 300	Principles of Soil Science	3
NRE 301	Principles of Soil Science Lab	2
NRE 403	Agricultural Entomology	4
Major Specific Elective		4
	Credit Hours	**17**
Second Semester		
NRE 490	ES/NRRM Capstone Prep	3
NRE 322	Assess I: Terrestrial Systems	4
MGT 320	Principles of Management	3
Major Specific Elective		4
	Credit Hours	**14**
Fourth Year		
First Semester		
NRE 402	Sustainable Agriculture	3
ENT 250	Intro to Entrepreneurship	3
Major Specific Elective		3
Major Specific Elective		4
	Credit Hours	**13**
Second Semester		
NRE 470 or NRE 491	ES Internship or ES Senior Capstone	3
NRE 401	Horticulture	4
Writing Intensive		3
Major Specific Elective		4
Major Specific Elective		3
	Credit Hours	**17**
	Total Credit Hours	**123**