

## **THE COLLEGE OF AGRICULTURE AND FOOD SCIENCE**

The College of Agriculture and Food Science is designed to foster the development of agriculture and food sciences in Liberia and in the world community by training students in the food and agricultural sciences. It provides the foundation of a dream for tomorrow. It is where one begins to cultivate love and passion for agriculture and environment that lead into life-giving profession. Its programs reflect today's technological advancements and possibilities. Its faculty is devoted to teaching, research, and extension. It is geared to the exploration of new possibilities and developments, and the dissemination of new technologies to the students and the community.

The College of Agriculture is the first and the only college that offers a four-year agriculture degree in Southeast, Liberia. As the premier agricultural school in the Southeast, where inhabitants' major livelihood is subsistence farming, the College's focus and priority would be the transformation and development of agriculture as a business and industry. The graduates become the new breed of farmers who could not only farm, but could introduce to their communities new technologies that could result in increased production of traditional food crops and livestock and sustained environmental preservation.

### ***Vision***

College of Agriculture and Food Science aspires to be the center of advanced agriculture and food production.

### ***Mission***

College of Agriculture and Food Science aims to provide opportunity for development and advancement of agriculture. It aims to provide venues for the application of scientific, technological, and business knowledge embracing food, animal production, distribution, and consumption. It aims to transform future leaders in the agriculture and food science through innovative learning approaches as it caters to the needs of the students.

### ***Program Description:***

The degree of Bachelor of Science in Agriculture introduces to the students the various disciplines and fields in agriculture. It provides rich experiential learning and unique opportunity for an individual to develop professional, leadership, and communication skills that would eventually lead him/her to a productive career.

The program includes study of the traditional agriculture production such as: crop science, soil science, animal science, rubber science, and agricultural engineering. The inception of food sciences and nutrition addressed the urgency of giving priority to the preparation and preservation of traditional food crops and animals. The inclusion of agricultural education and extension not only addresses the major bottleneck in the

national agricultural extension service, but prepares teachers to teach agriculture in secondary schools.

Agricultural marketing and business programs expose the students to the importance of agriculture as a way of life and as a profession essential to national growth and development. The aesthetic nature of agriculture, with emphasis on the environment, buttresses the importance of horticulture and landscaping thereby preparing the students for a career in the industry.

The agricultural farm is the arena where the students embark on a hands-on approach to learning, getting their hands soiled right from the very start of their curriculum years. The students learn the principles of good science, and apply them both in the laboratory and in the field. They are provided the opportunity to work with and care for animals and to engage in the management and cultivation of traditional food crops, and also to understand the marketing of agricultural commodities. The agricultural farm is the major economic base that provides resources to support the college and the university. Students must feel that learning is not all work, but also fun!

***Program Objectives:***

The program aims to:

1. Expose students to the technical and practical application of agricultural science; and
2. Prepare and train students to be engaged in agriculture as an industry and business

***Program Learning Outcomes:***

Students are able to:

1. Demonstrate knowledge and ability to apply the skills acquired by participating in the development of agricultural ventures at the college;
2. Apply their technical knowledge and skills by developing a relationship with the community by providing technical assistance to their neighbors; and
3. Engage in research and on-farm trials that will lead to the development and promotion of new crops.

***Curriculum Requirements:***

- |                                     |                 |
|-------------------------------------|-----------------|
| • General Education                 | 52 Credit Hours |
| • College Specific Required Courses | 21 Credit Hours |
| • Professional Courses              | 57 Credit Hours |
| • Elective Courses                  | 6 Credit Hours  |

## *Bachelor of Science in Agriculture – Animal Science*

### *Freshman Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 101	English Grammar and Phonetics	3	ENG 102	Academic Reading and Writing	3
MATH 101	College Algebra	3	MATH 102	Analytical Geometry and Trigonometry	3
BIO 101	General Biology	4	CHEM 101	Principles of Chemistry	4
PSY 101	Intro to Psychology	3	CSE 102	Computer Literacy	3
CSE 101	Introduction to Computers	3	PHI 102	Intro to Philosophy	3
AGR 121	Practicum I	1	HIST 101	Liberian History	3
PED 101	Physical Fitness and Wellness I	1	PED 102	Physical Fitness and Wellness II	1
			AGR 122	Practicum II	1
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>21</b>

### *Sophomore Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 103/ AGR 205	Technical Communication and Public Speaking	3	ENG 204	Introduction to Literature	3
SSC 201	Introduction to Liberian Society, Issues and Problems	3	FRE/ GRE/ CHI102	Advanced French/ Grebo /Chinese	3
FRE/ GLE/ CHI101	French/ Grebo/ Chinese	3	PHY 201	Physics	4
CHEM 201	Organic Chemistry)	4	CHEM 202	Inorganic Chemistry	4
EVS 201	Introduction to Environmental Science	3	AGR 204	Agricultural Marketing	3
AGR 201	Agricultural Economics	3	AGR 206	Agricultural Statistics & Experimental Design	3
AGR 221	Practicum III	1	AGR222	Practicum IV	1
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>21</b>

**Junior Year**

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
AGR 323	Introduction to Soil Science	3	AGR 304	Extension Education	3
AGR 341	Introduction to Animal Science	3	AGR 306	Genetics	3
AGR 305	Plant Science	3	AGR 308	Agriculture & Climate	3
AGR 351	Introduction to Forestry	3	AGR 352	Post-harvest Management &	3
EED 301	Entrepreneur & Micro Enterprise		AGR 318	Animal Science (Cattle and Small ruminant)	3
AGR 317	Animal Physiology	3	AGR 468	Animal Health & Disease Control	3
AGR 321	Seminar I	1	AGR 322	Seminar II	1
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>19</b>

**Senior Year**

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
AGR 423	Basic Horticulture	3	AGR 426	Senior Research Project	4
AGR 425	Internship	3	AGR 418	Animal Science (Swine)	3
AGR 417	Animal Science (Fish)	3	AGR 416	Feeds and Feeding	3
AGR 419	Animal Science (Poultry)	3			
AGR421	Seminar III	1			
<b>Total</b>		<b>13</b>	<b>Total</b>		<b>10</b>

**TOTAL CREDITS 135**

## *Bachelor of Science in Agriculture – Crop Science*

### *Freshman Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 101	English Grammar and Phonetics	3	ENG 102	Academic Reading and Writing	3
MATH 101	College Algebra	3	MATH 102	Analytical Geometry and Trigonometry	3
BIO 101	General Biology	4	CHEM 101	Principles of Chemistry	4
PSY 101	Intro to Psychology	3	CSE 102	Computer Literacy	3
CSE 101	Introduction to Computers	3	PHI 102	Intro to Philosophy	3
AGR 121	Practicum I	1	HIST 101	Liberian History	3
PED 101	Physical Fitness and Wellness I	1	PED 102	Physical Fitness and Wellness II	1
			AGR 122	Practicum II	1
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>21</b>

### *Sophomore Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 103/ AGR 205	Technical Communication and Public Speaking	3	ENG 204	Introduction to Literature	3
SSC 201	Introduction to Liberian Society, Issues and Problems	3	FRE/ GRE/ CHI102	Advanced French/ Grebo /Chinese	3
FRE/ GLE/ CHI101	French/ Grebo/ Chinese	3	PHY 201	Physics	4
CHEM 201	Organic Chemistry)	4	CHEM 202	Inorganic Chemistry	4
EVS 201	Introduction to Environmental Science	3	AGR 204	Agricultural Marketing	3
AGR 201	Agricultural Economics	3	AGR 206	Agricultural Statistics & Experimental Design	3
AGR 221	Practicum III	1	AGR222	Practicum IV	1
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>21</b>

**Junior Year**

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
AGR 323	Introduction to Soil Science	3	AGR 308	Agriculture & Climate Change	3
AGR 341	Introduction to Animal Science	3	AGR 304	Extension Education	3
AGR 351	Introduction to Forestry	3	AGR 306	Genetics	3
EED 301	Entrepreneur & Micro Enterprise	3	AGR 352	Post-harvest Management & Technology	3
AGR 305	Plant Science	3	AGR 312	Plant Physiology	3
AGR 321	Seminar I	1	AGR 322	Seminar II	1
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>16</b>

**Senior Year**

<b>First</b>			<b>Second</b>		
Code	Course Title	Credit	Code	Course Title	Credit
AGR 423	Basic Horticulture	3	AGR 426	Senior Research	4
AGR 425	Internship	3	AGR 452	Plant Pathology & Weed Science	3
AGR 413	Plant Nutrition	3	AGR 454	Tropical Food Crops	3
AGR 453	Plant Entomology & Pest Management	3			
AGR 455	Tropical Tree Crops	3			
AGR 421	Seminar III	1			
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>10</b>

**TOTAL CREDITS 135**

## *Bachelor of Science in Agriculture – Soil Science*

### *Freshman Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 101	English Grammar and Phonetics	3	ENG 102	Academic Reading and Writing	3
MATH 101	College Algebra	3	MATH 102	Analytical Geometry and Trigonometry	3
BIO 101	General Biology	4	CHEM 101	Principles of Chemistry	4
PSY 101	Intro to Psychology	3	CSE 102	Computer Literacy	3
CSE 101	Introduction to Computers	3	PHI 102	Intro to Philosophy	3
AGR 121	Practicum I	1	HIST 101	Liberian History	3
PED 101	Physical Fitness and Wellness I	1	PED 102	Physical Fitness and Wellness II	1
			AGR 122	Practicum II	1
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>21</b>

### *Sophomore Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 103/ AGR 205	Technical Communication and Public Speaking	3	ENG 204	Introduction to Literature	3
SSC 201	Introduction to Liberian Society, Issues and Problems	3	FRE/ GRE/ CHI102	Advanced French/ Grebo /Chinese	3
FRE/ GLE/ CHI101	French/ Grebo/ Chinese	3	PHY 201	Physics	4
CHEM 201	Organic Chemistry)	4	CHEM 202	Inorganic Chemistry	4
EVS 201	Introduction to Environmental Science	3	AGR 204	Agricultural Marketing	3
AGR 201	Agricultural Economics	3	AGR 206	Agricultural Statistics & Experimental Design	3
AGR 221	Practicum III	1	AGR222	Practicum IV	1
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>21</b>

**Junior Year**

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
Code	Course Title	Credit	Code	Course Title	Credit
AGR 323	Introduction to Soil Science	3	AGR 308	Agriculture & Climate Change	3
AGR 341	Introduction to Animal Science	3	AGR 304	Extension Education	3
AGR 351	Introduction to Forestry	3	AGR 306	Genetics	3
EED 301	Entrepreneur & Micro Enterprise	3	AGR 352	Post-harvest Management & Technology	3
AGR 321	Seminar I	1	AGR 322	Seminar II	1
AGR 305	Plant Science	3			
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>13</b>

**Senior Year**

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
AGR 423	Basic Horticulture	3	AGR 426	Senior Research	4
AGR 425	Internship	3	AGR 462	Soil & Water Conservation	3
AGR 461	Soil Management & Fertilization	3	AGR 464	Comparative Soil Ecosystem Analysis	3
AGR 463	Soil Chemistry	3	AGR 466	Soil Survey	3
AGR 465	Soil & Climate change	3			
AGR 421	Seminar III	1			
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>13</b>

**TOTAL CREDITS 135**



## *Bachelor of Science in Applied Agriculture*

### *Freshman Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 101	English Grammar and Phonetics	3	ENG 102	Academic Reading and Writing	3
MATH 101	College Algebra	3	MATH 102	Analytical Geometry and Trigonometry	3
BIO 101	General Biology	4	CHEM 101	Principles of Chemistry	4
PSY 101	Intro to Psychology	3	CSE 102	Computer Literacy	3
CSE 101	Introduction to Computers	3	PHI 102	Intro to Philosophy	3
AGR 121	Practicum I	1	HIST 101	Liberian History	3
PED 101	Physical Fitness and Wellness I	1	PED 102	Physical Fitness and Wellness II	1
			AGR 122	Practicum II	1
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>21</b>

### *Sophomore Year*

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ENG 103/ AGR 205	Technical Communication and Public Speaking	3	ENG 204	Introduction to Literature	3
SSC 201	Introduction to Liberian Society, Issues and Problems	3	FRE/ GRE/ CHI102	Advanced French/ Grebo /Chinese	3
FRE/ GLE/ CHI101	French/ Grebo/ Chinese	3	PHY 201	Physics	4
CHEM 201	Organic Chemistry)	4	CHEM 202	Inorganic Chemistry	4
EVS 201	Introduction to Environmental Science	3	AGR 204	Agricultural Marketing	3
AGR 201	Agricultural Economics	3	AGR 206	Agricultural Statistics & Experimental Design	3
AGR 221	Practicum III	1	AGR222	Practicum IV	1
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>21</b>

**Junior Year**

<b>First</b>			<b>Second</b>		
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
AGR 323	Introduction to Soil Science	3	AGR 308	Agriculture & Climate Change	3
AGR 341	Introduction Animal Science	3	AGR 304	Extension Education	3
AGR 351	Introduction to Forestry	3	AGR 306	Genetics	3
EED 301	Entrepreneur & Micro Enterprise	3	AGR 352	Post-harvest Management & Technology	3
AGR 305	Plant Science	3	AAE		3
AGR 321	Seminar I	1	AGR 322	Seminar II	1
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>13</b>

**Senior Year**

<b>First</b>			<b>Second</b>		
Code	Course Title	Credit	Code	Course Title	Credit
AGR 423	Basic Horticulture	3	AGR 426	Senior Research	4
AGR 425	Internship	3	AGR	AAE	3
AGR	AAE	3	AGR	Animal Health & Diseases Control	3
AGR 421	Seminar III	1	AGR	AAE	3
AGR	AAE	3	AGR	AAE	3
<b>Total</b>		<b>13</b>	<b>Total</b>		<b>16</b>

**TOTAL CREDITS 135**