

College of Agriculture

LUTHER WATERS, JR., *Dean*
R. L. GUTHRIE, *Executive Associate Dean*
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THE COLLEGE OF AGRICULTURE prepares students for careers in agriculture and related professions. Courses provide a broad foundation in the basic sciences, a general knowledge of the applied sciences, and a reasonable number of cultural subjects. Most of the basic science courses are given in the freshman and sophomore years and serve as a basis for a better understanding of the applied subjects, usually taken in the junior and senior years.

Curricula are offered in Agricultural Business and Economics, Agricultural Communications, Agronomy and Soils, Animal and Dairy Sciences, Fisheries and Allied Aquacultures, Horticulture and Poultry Science. The College of Agriculture also furnishes the subject matter training in Agriculture for the curricula of Biosystems Engineering and Agriscience Education. Students who wish to major in other agricultural fields should consult with the Dean.

Transfer credits for agricultural subjects not considered equivalent to those required in the chosen curriculum may be substituted for elective credit; however, duplication of credit will not be allowed. Equivalence of agricultural subjects will be determined by the Dean's Office; however, students may also obtain transfer credit on the basis of validating examinations. Arrangements for validating examinations must be made with the Dean of Agriculture in the first term of enrollment in the College of Agriculture at Auburn and the examinations must be completed before the middle of the second term. Transfer credit for courses which are upper-division courses at AU will not be accepted from two-year colleges.

Pre-Veterinary Medicine

It is possible to gain admission to the College of Veterinary Medicine upon completion of the minimum requirements listed below. Students may declare an option upon admission to the College of Agriculture and must declare an option by the end of their freshman year. If students are admitted to the College of Veterinary Medicine after the completion of all the requirements in the first three years of the option, they may obtain a Bachelor of Science degree in the option after completion of the freshman year in the College of Veterinary Medicine.

The minimum requirements (74 semester hours) for admission to the College of Veterinary of Medicine, Auburn University are incorporated in the first three years of the options listed under the following curricula: Animal & Dairy Sciences, Fisheries and Allied Aquacultures and Poultry Science.

English Composition (6), Mathematics (3), Core History (6), Philosophy (3), PHYS 1500 & 1501 and, PHYS 1510 & 1511 (8), Literature (6), Social Studies (6), BIOL 1020 & 1030 (8), CHEM 1030 & 1031 and CHEM 1040 & 1041 (8), CHEM 2070, 2071, and CHEM 2080 & 2081 (8), Fine Arts (3), BCHE 3200 (3), Scientific Electives (6).

See also the curriculum in Pre-Veterinary Medicine (PVET), College of Science and Mathematics.

Dual-Degree Program With Engineering

This program gives students the opportunity to receive two baccalaureate degrees - one in agriculture and one in engineering. Although the program was developed primarily for students desiring a combination of a biological sciences program with an engineering program, it does not preclude the consideration of other Agriculture-Engineering combinations.

In general, students will be enrolled in the College of Agriculture for approximately three years and in the College of Engineering for approximately two years. During the first three years, the students, should take those mathematics, physics and chemistry courses necessary to allow them to transfer to the College of Engineering. Additionally, before transferring to the College of Engineering, they should have completed approximately three-fourths of the total hours required by the College of Agriculture for the awarding of the degree.

To become dual-degree candidates under this program, students must have GPAs which indicate the likelihood of satisfactory completion of College of Engineering degree requirements and recommendation from the Dean of the College of Agriculture. The recommendation should be sought one term before the expected transfer to the College of Engineering.

It is also possible for qualified students to transfer to the College of Engineering following the junior year with the intent of seeking a master's degree rather than a bachelor's degree in one of the engineering disciplines. Consult the Engineering Dean's Office concerning this option.

Minors

AGRIBUSINESS MINOR

18 semester hours in Minor (minimum 9 hours at 3000 level or above)

Courses required:		Cr. Hr.
ACCT	2910 Fundamentals of Accounting.....	3
AGEC	4040 Agriculture Finance.....	3
AGEC	6000 Principles of Agribusiness Mngt	OR
AGEC	6010 Farm Management	OR
AGEC	6100 Agribusiness Management	3
Elective Courses - See adviser for approved course listing.		

AGRONOMY & SOILS MINOR

17 semester hours in Minor (minimum 9 hours at 3000 level or above)

Courses required:		Cr. Hr.
AGRN	1000 Basic Crop Science	4
AGRN	2040 Introductory Soils.....	4
Elective Courses - See adviser for approved course listing.		

ANIMAL & DAIRY SCIENCE MINOR

15 -16 semester hours in Minor (minimum 9 hours at 3000 level or above)

Courses required:		Cr. Hr.
ANSC	1000 Introductory Animal & Dairy Science	4
Elective Courses - See adviser for approved course listing.		

ENTOMOLOGY MINOR

20 semester hours in Minor (minimum 13 hours at 3000 level or above)

Courses required:		Cr. Hr.
ENTM	3040 General Entomology.....	4
Elective Courses - See adviser for approved course listing.		

NATURAL RESOURCES ECONOMICS AND ENVIRONMENTAL POLICY MINOR

15 semester hours in Minor (minimum 12 hours at 3000 level or above)

Courses required:		Cr. Hr.
ECON	2030 Macroeconomics	3
AGEC	6090 Resource Economics I	3
AGEC	6120 Env & Natural Res Economics	3
Elective Courses - See adviser for approved course listing.		

PLANT PATHOLOGY MINOR

15 semester hours in Minor (minimum 9 hours at 3000 level or above)

Courses required:		Cr. Hr.
PLPA	3000 General Plant Pathology.....	3
Elective Courses - See adviser for approved course listing.		

POULTRY SCIENCE MINOR

15 semester hours in Minor (minimum 12 hours at 3000 level or above)

Courses required:		Cr. Hr.
POUL	1000 Introductory Poultry Science	3
POUL	3000 Commerical Poultry Production	4
Elective Courses - See adviser for approved course listing.		

RURAL AND COMMUNITY DEVELOPMENT MINOR

15 semester hours in Minor (minimum 9 hours at 3000 level or above)

Courses required:		Cr. Hr.
RSOC	3620 Community Organization	3
SOCY	3700 Methods of Social Research	3
Elective Courses - See adviser for approved course listing.		

College of Agriculture

AGRN	6020	Nutrient Management	3	**
AGRN	6150	Soil Morphology	**	4
AGRN	6000	Soils & Environmental Quality	**	3
AGRN	3920	Agronomy Internship	**	2
		Elective.....	1	1
			13	13

TOTAL HOURS - 120

Animal and Dairy Sciences (ANSC)

The department offers two curriculum options. The Pre-Vet/Pre-Professional option (ANPV) provides students with a foundation in the biological and physical sciences for careers in emerging areas of animal biotechnology while satisfying requirements for application to Auburn's College of Veterinary Medicine, other professional schools or graduate school. The Production option (ANSC) offers greater breadth in animal production management and agribusiness while retaining more electives hours for additional curriculum flexibility. Students may use electives to develop expertise in fields such as meat science, animal breeding, nutrition, reproduction, growth, behavior, equine science and companion animals.

Curriculum in Animal & Dairy Sciences- Production Option

FR	F	S		F	S
ENGL	1100	1120	English Composition	3	3
MATH	1130		Math	3	
BIOL	1020		Principles of Biology	4	**
BIOL		1030	Organismal Biology	**	4
CHEM	1030	1040	Fund of Chemistry I & II	3	3
CHEM	1031	1041	Fund of Chemistry I & II Lab	1	1
ANSC		1000	Introduction to ANSC.....	**	4
ANSC	1100		Orientation to ANSC	1	**
				15	15
SO					
ECON		2020	Microeconomics	**	3
ENGL	2200	2210	Great Books I & II.....	3	3
			Core Social Science Group 1.....	3	**
			Core History	3	3
CHEM	2030		Organic Chemistry	3	**
BIOL	2500	2510	Anat Physiol I & II.....	4	4
BIOL		3000	Genetics	**	4
				16	17
JR					
			Core Philosophy	3	**
PHYS	1000		Foundations of Physics	4	**
ANSC		3400	Animal Nutrition	**	4
ANSC		3500	Animal Breeding.....	**	3
ANSC	3600		Reproductive Physiol.....	4	**
ANSC		3700	Muscle Foods	**	4
ANSC		3800	Careers in Animal Ag.....	**	1
BCHE	3200		Principles of Biochemistry.....	3	**
AGEC		6000	Agribus Management	**	3
				14	15
SR					
			Core Art.....	3	**
COMM	1000		Communication	3	**
BIOL	3200		Microbiology	4	**
			Directed Elective	**	4
			Free Electives.....	4	10
				14	14
			TOTAL HOURS - 120		

Curriculum in Animal & Dairy Sciences- Pre-Vet – Pre-Professional Option

FR	F	S		F	S
ENGL	1100	1120	English Composition	3	3
MATH	1130		Math	3	**
BIOL	1020		Principles of Biology	4	**
BIOL		1030	Organismal Biology	**	4
CHEM	1030	1040	Fund of Chemistry I & II	3	3
CHEM	1031	1041	Fund of Chemistry I & II Lab	1	1
ANSC		1000	Introduction to ANSC.....	**	4
ANSC	1100		Orientation to ANSC	1	**
				15	15
SO					
ENGL	2200	2210	Great Books I & II.....	3	3
			Core Social Science Group 1.....	3	**
			Core History	3	3
			Core Art.....	**	3
CHEM	2070	2080	Organic Chemistry I & II.....	3	3
CHEM	2071	2081	Organic Chemistry Lab I & II.....	1	1

BIOL	2500	2510	Anat Physiol I & II.....	4	4
				17	17
JR					
			Core Philosophy	3	**
PHYS	1500	1510	General Physics I & II	3	3
PHYS	1501	1511	General Physics Lab I & II	1	1
ANSC		3400	Animal Nutrition	**	4
ANSC		3500	Animal Breeding.....	**	3
ANSC	3600		Reproductive Physiol.....	4	**
ANSC		3700	Muscle Foods	**	4
ANSC		3800	Careers in Animal Ag.....	**	1
BCHE	3200		Principles of Biochemistry.....	3	**
				14	16
SR					
ECON		2020	Microeconomics	**	3
BIOL	3000		Genetics	4	**
COMM	1000		Communication	3	**
BIOL	3200		Microbiology	4	**
			Directed Elective	**	4
			Free Electives.....	3	5
				14	12
			TOTAL HOURS - 120		

Biosystems Engineering (BSEN)

The Biosystems Engineering Department offers the only accredited degree in Biosystems Engineering in Alabama. It is committed to preparing students for productive professional careers in the biosystems industries and related natural resource and environmental systems sectors. Specific educational objectives of the program are to produce graduates with: the skills necessary to solve engineering problems associated with the production, processing, storage, and manufacture of food, fiber and agricultural products; the ability to combine engineering skills with training in biological sciences to solve problems and to work in multidisciplinary teams; the ability to analyze problems critically and conduct scientific experimentation and engineering analysis; the ability to continue developing professionally throughout their career.

The curriculum is coordinated by the colleges of Engineering and Agriculture. Beginning students should apply for admission to the College of Engineering and complete the Pre-Biosystems Engineering program.

See the College of Engineering Section for curriculum model, admission and degree requirements.

Fisheries and Allied Aquacultures (FISH)

Fisheries Science combines a general foundation in chemistry, mathematics and biological sciences with applied courses in the principles needed to manage fresh and saltwater aquatic resources. The degree is intended to equip students with a broad understanding of fundamental scientific principles needed to develop solutions for the increasing pressures on our aquatic resources and the need to provide safe, reliable food through aquaculture production. Through a sequence of courses, students specialize in emphasis areas of aquatic ecology, fisheries management or aquaculture. Careers for graduates include work in environmental management, fisheries resource management, extension, and commercial aquaculture production, processing, and marketing.

Curriculum in Fisheries & Allied Aquacultures

(Aquaculture, Aquatic Resources Management and Fisheries Management Areas of Emphasis)

FR	F	S		F	S
ENGL	1100	1120	English Composition	3	3
HIST	1010	1020	World History I & II.....	3	3
MATH	1610		Calculus I	4	**
PHYS		1000	Foundations of Physics	**	4
BIOL	1020		Principles of Biology	4	**
BIOL		1030	Org Biology.....	**	4
				14	14
SO					
CHEM	1030	1040	Fundamentals of Chemistry I & II	3	3
CHEM	1031	1041	Fund of Chemistry Lab I & II.....	1	1
ECON		2020	Principles of Microeconomics	**	3
ENGL	2200	2210	Great Books I & II.....	3	3
			Core Philosophy	3	**
			Social Science Group 1	3	**

BIOL	3060	Principles of Ecology.....**	4		
		Elective.....	2	**	
			15	14	
SUMMER					
FISH	2100	Introduction to Fish Science.....	6		
JR					
		Core Fine Arts.....	3	**	
AGEC	2100	Micro Comp Application	3	**	
CHEM	2030	Organic Chemistry	**	3	
STAT	2510	Stat Ag & Life Science	**	3	
		Emphasis	4	4	
FISH	6220	Water Science.....**	3	**	
FISH	6320	Limnology	**	4	
			13	14	
SR					
COMM	1010	Communication Skills.....	**	3	
		Emphasis	4	9	
FISH	3930	Seminar	1	**	
FISH	6380	General Ichthyology.....	4	**	
FISH	6510	Fish Biology & Management.....**	3	**	
		Elective.....	3	3	
			15	15	
		TOTAL HOURS - 120			

Emphasis - See adviser for approved course listing.

Horticulture (HORT)

Courses prepare Horticulture graduates for the following careers: nursery manager, landscape designer, landscape installer, landscape maintenance, interior landscaping, plant propagator, city or state horticulturist, extension horticulturist, horticulture writer, horticulture teacher, florist shop manager, greenhouse manager, vegetable producer, orchard manager, chemical company representative, seed company representative or retail garden center manager.

Three undergraduate tracks are available to students in Horticulture: Landscape Horticulture, Nursery and Greenhouse Science and Fruit and Vegetable Crop Production. Horticulture offers masters and doctoral degrees which leads to professional positions in teaching, research and extension.

Curriculum in Nursery & Greenhouse Science

FR	F	S		F	S
BIOL	1020		Principles of Biology.....	4	**
BIOL		1030	Organismal Biology.....	**	4
CHEM		1030	Fundamentals of Chemistry	**	3
CHEM		1031	Fundamentals of Chemistry Lab.....	**	1
ENGL	1100	1120	English Composition I & II.....	3	3
MATH	1130		Math	3	**
			Core History I & II	3	3
HORT	1010		Introduction to Horticulture	1	**
				14	14
SO					
ECON	2020		Microeconomics	**	3
ENGL	2200	2210	Great Books I & II.....	3	3
			Core Philosophy	**	3
COMM		1000	Professional Communication.....	**	3
AGRN	2040		Introductory Soils	4	**
AGEC	2100		Microcomp App in Agriculture	3	**
			Social Science Group I	3	**
HORT	2240		Plant Propagation.....**	**	3
HORT	3210		Small Trees, Shrubs & Vines	**	4
				16	16
JR					
			Core Fine Arts.....	**	3
PLPA	3000		General Plant Pathology	3	**
AGRN	3150		Turfgrass Management.....	4	**
ENTM		4020	Economic Entomology	**	4
HORT	3000		Growth & Dev of Hort Plants or	3	**
BIOL	3100		Plant Biology	3	**
BIOL	3101		Plant Biology Lab.....	1	**
HORT	3220		Arboriculture.....	4	**
HORT	3950		Careers in Horticulture	1	**
HORT		4100	Herbaceous Ornamentals.....**	**	4
			Horticulture Elective Group 1	**	4
				19	15

SR					
HORT	6220	Greenhouse Management Science.....	4	**	
HORT	6230	Nursery Management.....	3	**	
		Horticulture Elective Group 1	3-4	**	
		Horticulture Elective Group 2	3-4	3-4	
		Electives	4-6	6-8	
			19	10-11	

TOTAL HOURS - 120

Horticulture Elective Group 1 and 2: see adviser for approved course listing.

Curriculum in Landscape Horticulture

FR	F	S		F	S
BIOL	1020		Principles of Biology.....	4	**
BIOL		1030	Organismal Biology	**	4
CHEM		1030	Fundamentals of Chemistry	**	3
CHEM		1031	Fundamentals of Chemistry Lab	**	1
ENGL	1100	1120	English Composition I & II.....	3	3
MATH	1130		Math	3	**
			Core History I & II	3	3
HORT	1010		Introduction to Horticulture	1	**
				14	14
SO					
ECON	2020		Microeconomics	3	**
ENGL	2200	2210	Great Books I & II.....	3	3
			Core Philosophy	**	3
COMM		1000	Public Speaking.....	**	3
AGRN	2040		Introductory Soils	4	**
AGEC	2100		Microcomp App in Agriculture	3	**
			Social Science Group 1	3	**
HORT	2240		Plant Propagation.....**	**	3
HORT	3210		Small Trees, Shrubs & Vines	**	4
				16	16
JR					
			Core Fine Arts.....	**	3
PLPA	3000		General Plant Pathology	3	**
AGRN	3150		Turfgrass Management.....	4	**
ENTM		4020	Economic Entomology	**	4
HORT	3000		Growth & Develop of Hort Plants	3	**
HORT	3220		Arboriculture.....	4	**
HORT	3950		Careers in Horticulture	1	**
HORT	4100		Herbaceous Ornamentals.....**	**	4
HORT	4270		Intermediate Landscape Design	**	3
				15	14
SR					
HORT	6210	Landscape Bid, Install & Maint	**	4	
		Horticulture Elective Group 1	7-8	**	
		Horticulture Elective Group 2	3-4	3-4	
		Electives	3-6	7-8	
			15-16	14-15	

TOTAL HOURS - 120

Horticulture Elective Group 1 and 2: see adviser for approved course listing.

Curriculum in Fruit & Vegetable Production

FR	F	S		F	S
BIOL	1020		Principles of Biology.....	4	**
BIOL		1030	Organismal Biology	**	4
ENGL	1100	1120	English Composition I & II.....	3	3
MATH	1130		Math	3	**
			Core Art.....	**	3
			Core History	3	3
COMM	1000		Public Speaking.....	**	3
HORT	1010		Introduction to Horticulture	1	**
				14	16
SO					
CHEM	1030	1040	Fundamentals of Chemistry I & II	3	3
CHEM	1031	1041	Fundamentals of Chemistry I & II Lab	1	1
ENGL	2200	2210	Great Books I & II.....	3	3
			Core Philosophy	3	**
			ACCT 2150 or ECON 2020.....	**	3
HORT	2010		Fruit and Nut Production.....	4	**
HORT	2030		Vegetable Production	**	3
HORT	2240		Plant Propagation.....**	**	3
				14	16
JR					
AGEC	2100		Microcomp. App in Agriculture	**	3
PLPA	3000		Plant Pathology	3	**
ENTM		4020	Economic Entomology	**	4
			Social Science Group 1 & 2.....	3	3
			Horticulture Group 1or 2.....	3-4	3-4
HORT	3000		Growth & Dev of Hort Plants.....	3	**
HORT	4120		Small Fruit & Pecan Culture.....**	**	3
				12-13	16-17

SUMMER				
HORT	4110	Tree Fruit Culture	3	
SR				
HORT	4130	Sustain Veg Crop Production.....	3	**
HORT	4140	Postharvest Biology & Tech	3	**
		Horticulture Elective Group 1 or 1.....	**	6-8
AGRN	3040	General Soils.....	4	**
		Electives	3-6	4-6
			13-16	12
		TOTAL HOURS - 120		

Horticulture Elective Group 1 and 2: see adviser for approved course listing.

Poultry Science (POUL)

This curriculum is designed to develop technical, analytical, communication, business and management skills needed for advancement to leadership positions in the live poultry production, poultry food product production, and allied agricultural industries. Graduates will be able to apply their knowledge of science, economics, business and ethics to identify, analyze and responsibly address challenges associated with poultry production and the production of nutritious, wholesome and safe poultry products for the modern consumer. Professional and general electives allow students to pursue expertise in their individual area of interest. Although not specifically required, enrollment in summer internship is encouraged and accepted as professional elective credit.

Curriculum in Poultry Science

FR	F	S		F	S
AGEC		2100	Microcomp in Agriculture.....	**	2
CHEM	1030	1040	Introduction to Chemistry I & II	3	3
CHEM	1031	1041	Introduction to Chemistry I & II Lab	1	1
COMM		1000	Public Speaking.....	**	3
ENGL	1110	1120	English Composition I & II.....	3	3
MATH	1130		Pre-Calculus w/Trigonometry	3	**
			Social Science Group I	**	3
POUL	1000		Introductory Poultry Science	3	**
				13	15
SO					
BIOL	1020		Principles of Biology.....	4	**
BIOL		1030	Organismal Biology	**	4
ECON		2020	Microeconomics	**	3
ENGL	2200	2210	Great Books I & II.....	3	3
PHYS		1000	Fundamentals of Physics	**	4
			Core History	3	3
			Core Philosophy	3	**
CHEM	2030		Survey Organic Chemistry	3	**
				16	17
JR					
BCHE		3200	Principles of Biochemistry	**	3
POUL	3030		Comm Poultry Production.....	4	**
POUL	3150		Poultry Physiology	**	4
POUL	3060		Brd, Frt, & Htch.....	**	4
STAT	2510		Introduction to Statistics.....	3	**
			Professional Electives	4	4
				14	15
SR					
AGEC		6000	Agribusiness Management.....	**	3
			COMM 2410 or ENGL 3040 or ENGL 3080..	**	3
BIOL	3200		Microbiology	4	**
POUL	4050		Poultry Feeding	4	**
POUL	4080		Poultry Health	**	3
POUL	4110		Proc & Market	3	**
POUL	4160		Principle Food Safety	**	3
			General Electives	**	3
			Professional Electives	4	**
				15	15
		TOTAL HOURS - 120			

Professional electives see adviser for approved list.

Poultry Science Pre-Veterinary Medicine (POPU)

This curriculum develops technical, analytical and communication skills, as well as the broad scientific knowledge base needed for success in technical and research positions in the poultry and allied industries, or post-graduate programs leading to advanced degrees in the sciences; such as, the Master of Science, Doctor of Philosophy or Doctor of Veterinary Medicine. Courses listed for the first six semesters (91 hours) satisfy requirements for admission to the College of Veterinary Medicine. Completion of the remaining requirements or one year in the College of Veterinary Medicine entitles the student to a B.S. degree in Poultry Science.

Curriculum in Poultry Science/Pre-Veterinary Medicine

FR	F	S		F	S
BIOL	1020		Principles of Biology.....	4	**
BIOL		1030	Organismal Biology	**	4
CHEM	1030	1040	Introduction to Chemistry I & II	3	3
CHEM	1031	1041	Introduction to Chemistry I & II Lab	1	1
MATH	1130		Pre-Calculus w/Trigonometry	3	**
ENGL	1110	1120	English Composition I & II.....	3	3
POUL		1000	Introductory Poultry Science	**	3
				14	14
SO					
ENGL	2200	2210	Great Books I & II.....	3	3
			Core History	3	3
			Core Fine Arts	3	**
			Core Philosophy	**	3
			Microeconomics	**	3
ECON		2020	Organic Chemistry I & II.....	3	3
CHEM	2070	2080	Organic Chemistry I & II Lab.....	1	1
CHEM	2071	2081	Social Science Group I	3	**
				16	16
JR					
PHYS	1500	1510	General Physics I & II	3	3
PHYS	1500	1510	General Physics I & II	1	1
BCHE	3200		Principles of Biochemistry.....	3	**
BIOL	3000		Genetics	4	**
BIOL	3200		Microbiology	**	4
POUL	3030		Comm Poultry Production	4	**
POUL	3060		Brd, Frt, & Htch	**	4
POUL	3150		Poultry Physiol	**	4
				15	16
SR					
AGEC		2100	Microcomp. App. in Agriculture.....	**	2
STAT		2510	Statistics	**	3
COMM	1000		Public Speaking.....	3	**
POUL	4050		Poultry Feeding	4	**
POUL	4160		Principle Food Safety	**	3
POUL	4110		Process & Market	3	**
POUL	4080		Poultry Health	**	3
			General Elective	4	4
				14	15
		TOTAL HOURS - 120			

Professional electives see adviser for approved list.