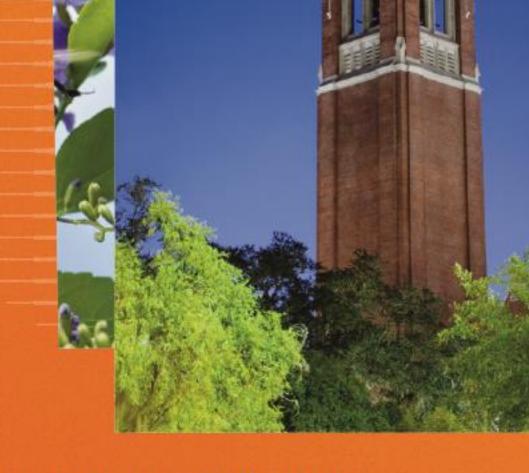
EFFECTIVE SUMMER B 2023





UF/IFAS COLLEGE OF AGRICULTURAL AND LIFE SCIENCES



# College of Agricultural and Life Sciences Transfer Guide

# Index

GENERAL INFORMATION	3
STATEWIDE AND DISTANCE EDUCATION PROGRAMS	5
COURSE EQUIVALENCIES	7

# **CALS Majors**

AGRICULTURAL EDUCATION AND COMMUNICATION	9
AGRICULTURAL OPERATIONS MANAGEMENT	11
ANIMAL SCIENCES	
BIOLOGICAL ENGINEERING (College of Engineering Major)	14
BIOLOGY	16
BOTANY	
DIETETICS	
ENTOMOLOGY AND NEMATOLOGY	20
ENVIRONMENTAL MANAGEMENT IN AGRICULTURE AND NATURAL RESOURCES	22
ENVIRONMENTAL SCIENCE	23
FAMILY, YOUTH AND COMMUNITY SCIENCES	24
FOOD AND RESOURCE ECONOMICS	25
FOOD SCIENCE	26
FOREST RESOURCES AND CONSERVATION	27
GEOMATICS	
MARINE SCIENCES	29
MICROBIOLOGY AND CELL SCIENCE	
NATURAL RESOURCE CONSERVATION	31
NUTRITIONAL SCIENCES	32
PLANT SCIENCE	
SOIL, WATER, AND ECOSYSTEM SCIENCES	
WILDLIFE ECOLOGY AND CONSERVATION	

# **General Information**

### **Important Contacts**

### College of Agricultural and Life Sciences

P.O. Box 110270 / 2020 McCarty Hall D Gainesville, FL 32611-0270 (352) 392-1963 Fax (352) 392-8988 www.cals.ufl.edu info@cals.ufl.edu

### **UF Admissions Office**

P.O. Box 114000 201 Criser Hall Gainesville, FL 32611-4000 (352) 392-1365 www.admissions.ufl.edu

### **UF Dean of Students**

P.O. Box 114075 202 Peabody Hall Gainesville, FL 32611 (352) 392-1231 www.dso.ufl.edu

### **UF Student Financial Affairs**

P.O. Box 114025 S07 Criser Hall Gainesville, FL 32611 (352)-392-1275 www.sfa.ufl.edu

### **UF Housing**

P.O. Box 112100 Gainesville, FL 32611 (352) 392-2161 www.housing.ufl.edu

# The Basics of Transfer Admission

**The College of Agricultural and Life Sciences (CALS)** has a tradition of working closely with community/state college students to ensure a smooth transfer to the University of Florida. Prospective students can choose from 21 majors in CALS. The Biological Engineering major is offered by the Department of Agricultural and Biological Engineering through the Herbert Wertheim College of Engineering.

IMPORTANT: CALS applicants must meet the following requirements before transferring:

- Obtain an Associate of Arts degree from a Florida public community/state college. Students transferring from private institutions, state universities in Florida or institutions outside Florida must have at least 60 semester hours of transferable credit. Vocational coursework is not accepted.
- Complete two years of sequential high school foreign language courses or 8-10 hours of sequential college-level foreign language courses (or prove proficiency).
- Have at least a 2.0 GPA at each higher education institution attended as calculated by UF (all graded attempts calculated, NO grade forgiveness).
- Meet the GPA required for the major (all graded attempts calculated, <u>NO grade forgiveness</u>).
- Complete specific prerequisite courses required for the major with the required GPA.
- Complete civic literacy requirement.

This transfer guide includes GPA and course requirements organized by major and specialization.

### **Application Process**

Students may apply to CALS by completing the online transfer application available at: <u>www.admissions.ufl.edu/apply/transfer</u>. Applicants should apply no earlier than one year prior to the intended semester of transfer, and no later than the established deadline published at: <u>https://admissions.ufl.edu/apply/transfer/trapdates</u>.

# **Opportunities in CALS**

### **CALS Honors Program**

The CALS Honors Program is the only formal upper-division honors program at the University of Florida. The program is designed for students with 60 or more hours and a GPA of 3.75 or higher. Participation in a community/state college honors program is not required. For more information on the CALS Honors Program contact:

Dr. Allen Wysocki, CALS Honors Program Director (352) 392-1963 wysocki@ufl.edu cals.ufl.edu/honors

#### Scholarships

Incoming or current CALS students may submit applications. Biological Engineering students in the Herbert Wertheim College of Engineering are also eligible. All scholarships awarded through CALS are contingent upon funding and academic performance. Applications will be available beginning in December and must be submitted to CALS by April of each year. Specific deadlines will be posted at <u>cals.ufl.edu/scholarships/</u>

#### **Student Organizations**

CALS boasts more than 48 student organizations associated with majors and areas of interest. In addition, CALS sponsors several organizations, including the Agricultural and Life Sciences College Council, CALS Ambassadors, MANRRS (Minorities in Agriculture, Natural Resources and Related Sciences), and Alpha Zeta. These organizations offer students opportunities for close interaction with faculty, professionals from various fields and peers. Additional information can be accessed at <u>cals.ufl.edu</u>.

### Global Gators – International Travel

CALS is committed to preparing students for the global challenges they will face as tomorrow's leaders. To meet this goal, CALS encourages students to participate in international travel and study experiences offered by the University of Florida or in college sponsored international programs. Recent destinations include Italy, France, Costa Rica, and Morocco. More information about Global Gators can be accessed at: cals.ufl.edu/getinvolved/studyabroad/

#### Health-Related Preprofessional Curricula

Students may major in any area of study while preparing for professional studies in dentistry, medicine, physical therapy, occupational therapy, optometry, pharmacy, and veterinary medicine. The majors listed below include the general preprofessional requirements (math, biology, chemistry, organic chemistry, and physics) as part of the required courses for the bachelor's degree along with other required and recommended courses for the health professions.

Animal Sciences Animal Biology Specialization Biology

Preprofessional Specialization

**Entomology and Nematology** *Preprofessional Specialization*  **Microbiology and Cell Science** 

**Nutritional Sciences** 

Wildlife Ecology and Conservation Preprofessional Specialization

### Statewide and Distance Education Programs

CALS is committed to bringing quality educational opportunities to students throughout Florida. Through statewide and distance education programs students can obtain Bachelor of Science degrees without traveling to Gainesville. Students wishing to transfer to the University of Florida following the completion of an Associate of Arts degree from a Florida community/state college may consider pursuing a bachelor's degree at one of four UF/IFAS Research and Education Centers (REC) located throughout the state or online. https://cals.ufl.edu/current-students/statewide/

Mid-Florida REC Programs: <i>Plant Science</i> Contact: Jeanie Houk, Academic jeanie.houk@ufl.edu   (3 mrec.ifas.ufl.edu/		West Florida REC Programs: Plant Science Natural Resource Conserv Contact: Dallas Brooks, Academic <u>dallasbrooks@ufl.edu</u>   (85 wfrec.ifas.ufl.edu/teaching/	Advisor 50) 983-7138
Ft. Lauderdale REC Programs: Geospatial Analysis Surveying and Mapp Plant Science Contact: Dr. Kimberly A. Moore klock@ufl.edu   (954) 57 flrec.ifas.ufl.edu/teachin	oing , Professor 77-6328	Gulf Coast REC Programs: Agricultural Education and Agricultural Education Communication and Le Development Geomatics Geospatial Analysis Surveying and Mapping Contact: Jason Steward, Academic jsteward@ufl.edu   (813) 7 gcrec.ifas.ufl.edu/uf-plant-o	eadership g c Advisor '57-2280

#### **Online Programs**

Agricultural Education and Communication

(Communication and Leadership Development specialization) Contact:

Becky Cook, Academic Advisor rtrammell@ufl.edu | (352) 273-2573

Entomology and Nematology

(Biological Science of Insects OR Urban Pest Management specializations) Contact:

Ally Fleischer, Academic Advisor afleischer@ufl.edu | (352) 273-3912

Environmental Management in Agriculture and Natural Resources – Interdisciplinary Studies Contact:

Michael J. Sisk, Academic Advisor mjsisk@ufl.edu | (352) 294-3152

#### Microbiology and Cell Science

Requires two face-to-face laboratory classes at statewide locations or in Gainesville. Contact:

Dr. Jay De jde@ufl.edu | (352) 273-4206

# South Florida Recruitment, PaCE and UF Online Contact:

Andrew Horvath, Academic Advisor ahorvath@ufl.edu | (352) 273-3475

# <u>Course Equivalencies for Critical Tracking Courses at UF</u> (Prerequisites)

(Prerequisite	<u>s)</u>	
UF COURSE	COMMUNITY/	COURSE DESCRIPTION
	STATE	
	COLLEGE	
	EQUIVALENT	
ACG 2021	ACG 2001 &	Principles of Accounting I
100 2021	ACG 2011	Principles of Accounting I
	or	
	ACG 2011C	Introduction to Financial Accounting
BSC 2005	BSC 1005	Biological Sciences
200 2000	BSC 2005	
	BSC 2007	
	BSC 1020	Human Biology
	BSC 2020	lanan biology
BSC 2005 Lab	BSC 1005 Lab	Laboratory in Biological Sciences
	BSC 2005 Lab	Eaboratory in Diological Colonocc
	BSC 1020 Lab	Human Biology Lab
BSC 2010	BOT 1010C	Introductory Botany
	BOT 2010C	
	BSC 1010	Integrated Principles of Biology 1
	BSC 2010	
	ZOO 1010	General Zoology 1
	ZOO 2010	
BSC 2011	BOT 1011C	Plant Diversity
	BOT 2011C	
	BSC 1011	Integrated Principles of Biology 2
	BSC 2011	
	ZOO 1011	General Zoology 2
	ZOO 2011	
CHM 1025	CHM 1025	Introduction to Chemistry
	CHM 1025 & Lab	
CHM 1083	CHM 1083	Consumer Chemistry
CHM 2045	CHM 1040	General Chemistry 1
	CHM 1041	
	CHM 1045	
	CHM 2045	
CHM 2046	CHM 1046	General Chemistry 2
	CHM 2046	
CHM 1030	CHM 1020	Basic Chemistry Concepts and Applications 1
CHM 1031	CHM 1021	Basic Chemistry Concepts and Applications 2
ECO 2013	ECO 1013	Principles of Macroeconomics
	ECO 2013	
ECO 2023	ECO 1023	Principles of Microeconomics
	ECO 2023	
EDF 3110	DEP 1004	Child Development
	DEP 2102	
	DEP 2004	Human Growth and Development

**PLEASE NOTE:** GPA is calculated using UF's grade point system (all attempts at a course count).

Refer to the <u>UF grades and grading policies webpage</u> for more information.

UF COURSE	COMMUNITY/	COURSE DESCRIPTION
	STATE	
	COLLEGE	
	EQUIVALENT	
ENC 2210	ENC 1210	Writing for Mass Communication
	MMC 2100	Writing for Mass Communication
MAC 1147	ENC 2210	Technical Writing
	MAC 1140 & 1114 MAC 1105 & 1114	Precalculus Algebra and Trigonometry College Algebra and Trigonometry
	MAC 1105 & 1114 MAC 1147	Precalculus: Algebra and Trigonometry
MAC 2233	MAC 2233	Survey of Calculus
MAC 2233	MAC 2311	-
MAC 2311 MAC 2312		Analytic Geometry and Calculus 1
	MAC 2312	Analytic Geometry and Calculus 2
MAC 2313	MAC 2313	Analytic Geometry and Calculus 3
MAP 2302 MMC 2100	MAP 2302	Elementary Differential Equations
	JOU 1000 JOU 1100	
	JOU 2100	Introduction to Journalism Introduction to Journalism
	MMC 1100	Writing for Mass Communication
	MMC 2100	Writing for Mass Communication
	RTV 2102	Writing for the Electronic Media
	CRW 2200	Magazine Writing
	CRW 2600	Writing for Film and TV
OCE 1001	OCE 1001	Introduction to Oceanography
PHY 2004	PHY 2004	Applied Physics 1
PHY 2005	PHY 2005	Applied Physics 2
PHY 2020	PHY 1020	Introduction to Principles of Physics
PHY 2048	PHY 2048	Physics with Calculus 1
PHY 2049	PHY 2049	Physics with Calculus 2
PHY 2053	PHY 1053	Physics 1
	PHY 2053	
PHY 2054	PHY 1054	Physics 2
	PHY 2054	
PSY 2012	PSY 2012	Principles of Psychology
SPC 2608*	SPC 1608	Introduction to Public Speaking
	SPC 2608	*Note: Palm Beach State College students should contact CALS for
		course equivalencies.
STA 2023	STA 1023	Introduction to Statistics 1
	STA 2023	
	STA 2122	
SYG 2000	SYG 2000	Principles of Sociology
SYG 2430	SYG 2410	Marriage and Family
	SYG 2430	

Students may use <u>https://www.transferology.com/index.htm</u> as an additional resource.

# AGRICULTURAL EDUCATION AND COMMUNICATION

Agricultural Education Communication and Leadership Development

With a focus on disseminating scientific knowledge, agricultural education and communication professionals empower communities to gain a balanced understanding of food systems, natural resources, and related sciences. **Agricultural Education and Communication** students supplement core technical agriculture courses with teaching, leadership, or media experiences. An internship is required for this major, regardless of specialization.

The **Agricultural Education** specialization provides the basic courses for agricultural teacher certification in Florida. Students must have a minimum 2.5 GPA to enter the agricultural education specialization and, during their first semester, attain a passing score on the general knowledge portion of the Florida Teacher Certification Examination (FTCE). In addition, graduates must apply to the Florida Department of Education for certification.

**Communication and Leadership Development** prepares students for entry into agribusiness and communications positions related to human resource development, strategic communication, governmental relations, media relations, corporate training and development, and non-formal education. To build the capacity of students within the CLD undergraduate specialization to serve as catalysts in society, they will take a sequence of courses in both communication and leadership to build upon individual skill sets and specific interests of the student. All students within this specialization will further enhance their knowledge and skills in communication and leadership of agricultural and life sciences through courses that will provide them foundations in all forms of communication (digital, speaking, and writing) and leadership (interpersonal, groups and teams, organizations and global) in addition to specific areas such as social media, change, public issues, and campaign strategies.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### Agricultural Education specialization Required GPA = 2.5 overall and 2.5 in the following courses.

Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

	BSC 2005 & 2005L	Biological Sciences and Lab	4
	EDF 3110	Human Growth and Development	3
	MAC 1140	Precalculus Algebra	3
or	MAC 1105	Basic College Algebra	3
	SPC 2608	Introduction to Public Speaking	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

CHM 1083	Consumer Chemistry	3
ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
EDF 2085	Teaching Diverse Populations	3
STA 2023	Introduction to Statistics 1	3
or STA 2122	Statistics for Social Science	3

It is recommended for admission but not required, that students complete the <u>General Knowledge portion of</u> <u>the Florida Teacher Certification Exam</u> before transferring.

#### Communication and Leadership Development specialization

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

	BSC 2005 & 2005L	<b>Biological Sciences and Lab</b>	4
or	MAC 1140	Precalculus Algebra	3
	MAC 1105	Basic College Algebra	3
	PSY 2012	General Psychology	3
	SPC 2608	Introduction to Public Speaking	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

	CHM 1083	Consumer Chemistry	3
	ECO 2013	Macroeconomics	3
or	ECO 2023	Microeconomics	3
	STA 2023	Introduction to Statistics	3
or	STA 2122	Statistics for Social Science	3
		American History or Political Science	3

#### Find the academic advisor and website for this major on the CALS website.

Offered at the Gainesville and Plant City locations;

Communication and Leadership Development specialization is also offered through UF Online.

# AGRICULTURAL OPERATIONS MANAGEMENT

**Agricultural Operations Management** combines hands-on applied coursework and core business principles with emerging technologies and sustainable methods. Students gain experience in systems management, environmental quality, energy efficiency, agricultural machinery, GIS/GPS technology, remote sensing, irrigation, power systems, water control, and precision agriculture.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, (refer to pages 7-8 for course equivalencies) and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Agricultural Operations Management**

Required GPA = 2.0 overall and 2.0 in the following courses with a minimum grade of "C" in all courses.

	ACG 2021	Introduction to Financial Accounting	4
	BSC 2010 & 2010L	General Biology 1 and Lab	4
	CHM 2045 & 2045L	General Chemistry 1 and Lab	4
	MAC 2233	Survey of Calculus 1	3
or	MAC 1147	Precalculus	4
or	MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6
	ECO 2013	Macroeconomics	3
	STA 2023	Introduction to Statistics 1	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

SPC 2608	Introduction to Public Speaking	3
ENC 2210	Technical Writing	3
PHY 2004 & PHY 2004L	Applied Physics 1 and Lab	4
CGS 2531	Problem Solving Using Computer Software	3

### ANIMAL SCIENCES

#### Animal Biology Equine Food Animal Integrative Animal Sciences

Animal Sciences graduates work with the science and business of producing domestic livestock species or animal-related products. They may also pursue veterinary studies for future work with companion animals, livestock, or other species. **Animal Sciences** students study biotechnology, reproduction, genetics, nutrition, physiology, growth, behavior, management, and food processing.

**Animal Biology** is for students who wish to pursue professional or graduate programs. Students who plan to apply to the UF College of Veterinary Medicine in the equine, food animal, or the integrative animal sciences specializations are encouraged to select electives from the animal biology programs.

**Equine** prepares students for careers in the equine industry. By choosing appropriate electives, students can earn a minor or a dual major in agribusiness management, extension education or agricultural operations management. Career preparation can be strengthened through electives.

**Food Animal** prepares students for careers in livestock production, processing and allied industries. By choosing appropriate electives, students can earn a minor or a dual major in agribusiness management, extension education or agricultural operations management. Through proper selection of electives, students may emphasize beef, dairy or meat science. Career preparation can be strengthened through electives.

**Integrative Animal Sciences** is for students who wish to obtain a customized degree in animal sciences with a focus on a discipline rather than an animal species and are not pursuing a professional program in the health sciences. Examples include integration of the Animal Sciences with advanced training in artificial intelligence, reproduction, animal behavior, or environmental sciences.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Animal Biology specialization**

Required GPA must be a 2.0 overall and 2.5 in the following courses. This program is extremely competitive and the above GPA's are <u>MINIMUMS</u> and do not guarantee admission. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 1147	Precalculus	4
or MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

EČO 2013	Macroeconomics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

#### Equine; Food Animal; and Integrative Animal Sciences specializations

Required GPA = 2.0 overall and 2.0 in the following courses.

Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
MAC 1147	Precalculus	4
or MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6
STA 2023	Introduction to Statistics 1	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ENC 2210	Technical Writing	3
MCB 2000 & 2000L	Microbiology and Lab	4
SPC 2608	Introduction to Public Speaking	3

### **BIOLOGICAL ENGINEERING**

Agricultural Production Engineering Biosystems Engineering Land and Water Resources Engineering Packaging Engineering

Biological engineers apply principles of the life sciences to produce biofuels, food, feed, fiber, and other agricultural products from renewable bio-resources. They also protect the environment through conserving and replenishing our natural resources. **Biological Engineering** students study hydrodynamics, soil mechanics, thermodynamics, chemistry, biology, calculus, and more.

Students majoring in Biological Engineering are considered students of the Herbert Wertheim College of Engineering and should refer to that college for admission questions and curriculum guidance.

**Agricultural Production Engineering** – course topics may include designing environmental control systems or agricultural equipment, developing precision agriculture solutions, designing energy conservation and renewable energy systems, applying engineering design to food production systems and computer modeling.

**Biosystems Engineering** – areas of study may include converting raw biological materials into useful products, creating fuels from renewable resources, designing microbes to clean the environment, creating mathematical models of biological systems, applying principles of genetic engineering, and creating safe and efficient food production systems.

Land and Water Resources Engineering – focuses on sustainability of soil and water resources by designing effective drainage systems and efficient irrigation systems, identifying techniques for preserving wetlands and ecosystems and developing systems for maintaining water resources and water quality.

**Packaging Engineering** – focuses on the packaging requirements to protect and preserve products from the source to the consumer through evaluating the distribution and transportation processes, developing new materials and processes for packaging, designing, and marketing new packages, recycling of post-consumer packaging and sustaining resources.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses (refer to pages 7-8 for course equivalencies), and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Biological Engineering – all specializations**

#### Required GPA = 2.0 overall and 2.5 in the following courses (does not include labs)

Students MUST complete a minimum of <u>six</u> out of the following <u>eight</u> courses before transferring (refer to pages 7-8 for course equivalencies):

CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4
MAC 2312	Analytic Geometry and Calculus 2	4
MAC 2313	Analytic Geometry and Calculus 3	4
MAP 2302	<b>Elementary Differential Equations</b>	3
PHY 2048 & 2048L*	Physics with Calculus 1 and Lab	4
PHY 2049 & 2049L	Physics with Calculus 2 and Lab	4

Please note: a grade of "C" or better is required within two attempts in the above listed courses and **PHY 2048 & 2048L (\*)** must be completed as part of the minimum six courses before transferring.

The following course may be completed at the community/state college but is not required for admission to the Herbert Wertheim College of Engineering:

ENC 2210 Technical Writing 3

# **BIOLOGY**

Applied Biology Biotechnology Natural Science Preprofessional

This program provides a broad, general overview of the structure, function, growth, origin, evolution, and distribution of living organisms. **Biology** students take courses in biology, chemistry, physics, calculus, and statistics. The major is flexible and combines the faculty and resources of the College of Agricultural and Life Sciences and the College of Liberal Arts and Sciences to prepare students for career success. All specializations prepare students for graduate study in the biological sciences.

**Applied Biology** is for students who are interested in learning how fundamental biology is applied to solving problems. This specialization provides exposure to the major issues facing sustainability of human populations and natural resources.

**Biotechnology** prepares students for careers where knowledge of molecular biology and genetic engineering are important. Students will have the opportunity to learn various techniques and scientific procedures in molecular biology, virology, bioengineering, cell and tissue culture and bioinformatics.

**Natural Science** is for students interested in descriptive and interpretive biology, with an emphasis on field biology. The specialization provides exposure to the major forms of flora and fauna, and integrates some of the major elements that influence flora and fauna, namely soil/water relations and human activities.

**Preprofessional** is for students preparing for admission to medical, dental, physical therapy, occupational therapy, optometry, veterinary or other professional schools.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Biology – all specializations**

Required GPA must be a 2.0 overall and 2.5 in the following courses. This program is extremely competitive and the above GPA's are <u>MINIMUMS</u> and do not guarantee admission. Students MUST complete the following courses before transferring (refer to pages 7-8 for course

equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

#### Find the academic advisor and website for this major on the CALS website.

### **BOTANY**

#### General Botany Botanical Research

This program provides a broad background in the biology of plants, from the molecular to the whole-plant level. **Botany** students study anatomy, biochemistry, ecology, genetics, physiology, taxonomy, and molecular biology of plants. This flexible major combines the faculty and resources of the College of Agricultural and Life Sciences and the College of Liberal Arts and Sciences to prepare students for career success.

**General Botany** is for students who may not intend to pursue a graduate degree but are interested in a career in plant biology. This specialization provides some flexibility in tailoring the courses needed in order to pursue specific interests. Students are encouraged to consult with an advisor and botany faculty member when deciding on which courses to take.

**Botanical Research** is for students who intend to pursue a graduate degree and requires research with a faculty member. This specialization provides some flexibility in tailoring the courses needed in order to pursue specific interests. Students are encouraged to consult with an advisor and botany faculty member when deciding on which courses to take.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **General Botany specialization**

Required GPA = 2.0 overall and 2.5 in the following courses, with a C or better in each. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

Introductory Botany	3
General Biology 1 and Lab	4
Plant Diversity	3
General Biology 2 and Lab	4
General Chemistry 1 and Lab	4
General Chemistry 2 and Lab	4
Precalculus	4
Analytic Geometry and Calculus 1	4
Introduction to Statistics 1	3
	General Biology 1 and Lab Plant Diversity General Biology 2 and Lab General Chemistry 1 and Lab General Chemistry 2 and Lab Precalculus Analytic Geometry and Calculus 1

The following courses may be completed at the community/state college but are not required for admission to the College of Agricultural and Life Sciences. A grade of C or better is required in each.

Microeconomics	3
Technical Writing	3
Applied Physics 1 and Lab	4
Introduction to Public Speaking	3
	Technical Writing Applied Physics 1 and Lab

### **Botanical Research specialization**

Required GPA = 2.0 overall and 2.5 in the following courses, with a C or better in each. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BOT 2010C	Introductory Botany	3
or BSC 2010 & 2010L	General Biology 1 and Lab	4
BOT 2011C	Plant Diversity	3
or BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4

The following courses may be completed at the community/state college but are not required for admission to the College of Agricultural and Life Sciences. A grade of C or better is required in each.

ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

### DIETETICS

This program applies the science of food and nutrition to the health and well-being of individuals and groups. **Dietetics** students study chemistry, biology, microbiology, nutrition, communication, food science, and management. They are well-prepared for dietetic internships or graduate study.

\* Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### Dietetics

Required GPA must be a 2.0 overall and 2.5 in the following courses. This program is extremely competitive and the above GPA's are <u>MINIMUMS</u> and do not guarantee admission.

Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 1147	Precalculus	4
or MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
MCB 2000 & 2000L	Microbiology and Lab	4
PSY 2012	General Psychology	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

ATTENTION: Students entering the University of Florida Dietetics undergraduate program will be required to earn a master's degree to be eligible to sit for the Registered Dietitian Nutritionist Credentialing Exam. As of January 1, 2024, the ACEND Accrediting Agency will implement a new requirement of a terminal degree of master's before a graduate will be eligible to enter a dietetic internship. Undergraduate students will need to plan accordingly for these academic requirements.

# ENTOMOLOGY AND NEMATOLOGY

Biological Science of Insects Preprofessional Urban Pest Management

This biological science includes the study of insects, mites, ticks, spiders, and nematodes. These creatures can have both helpful and harmful effects on our food, environment, and health. **Entomology and Nematology** students study ecology, medically significant arthropods, social insects, insect management, physiology, behavior, evolution, natural ecosystem cycles, and systematics.

Biological Science of Insects prepares students for entry into entomological careers and graduate school.

**Preprofessional** prepares students for programs in medicine, dentistry, optometry, veterinary, chiropractic, osteopathy and podiatry.

**Urban Pest Management** is for entry to the pest control industry. Students receive instruction about arthropods, nematodes, plant diseases and weeds with reference to the pest problems in residential and commercial property. A business curriculum prepares students for management responsibilities. Students planning to attend graduate school should consult an advisor for appropriate math, chemistry, and physics courses.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Biological Science of Insects specialization**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 1147	Precalculus	4
or MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6
or MAC 2311	Analytics Geometry and Calculus 1	4

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

	ECO 2023	Microeconomics	3
	ENC 2210	Technical Writing	3
	MCB 2000 & MCB 2000L	Microbiology and Lab	4
	PHY 2004 & 2004L	Applied Physics 1 and Lab	4
or	PHY 2020	Introduction to Principles of Physics	3
	SPC 2608	Introduction to Public Speaking	3
	STA 2023	Introduction to Statistics 1	3

#### **Preprofessional specialization**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

#### **Urban Pest Management specialization**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
MAC 1147	Precalculus	4
or MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6
or MAC 2311	Analytic Geometry and Calculus 1	4
PHY 2004 & 2004L	Applied Physics 1 and Lab	4
or PHY 2020	Introduction to Principles of Physics	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
MCB 2000 & MCB 2000L	Microbiology and Lab	4
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

#### Find the academic advisor and website for this major on the CALS website.

#### Preprofessional specialization is only offered in Gainesville;

Biological Science of Insects AND Urban Pest Management Specializations are offered in Gainesville or through UF Online.

### ENVIRONMENTAL MANAGEMENT IN AGRICULTURE AND NATURAL RESOURCES

Interdisciplinary Studies

Using an interdisciplinary approach, students in this major develop the scientific and technical foundation needed to integrate and communicate the diverse environmental issues associated with urban, agricultural, and natural ecosystems. **Environmental Management in Agriculture and Natural Resources** students study hydrology, soil science, pest management, water resources, ecology, and natural resource policy.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Environmental Management in Agriculture and Natural Resources**

Required GPA = 2.0 overall and 2.0 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
or BSC 2005 & 2005L	<b>Biological Sciences and Lab</b>	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	<b>General Chemistry 2 and Lab</b>	4
MAC 2233	Survey of Calculus 1	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3
CHM 2046 & 2046L MAC 2233 SPC 2608	General Chemistry 2 and Lab Survey of Calculus 1 Introduction to Public Speaking	4 3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
GLY 2010C	Physical Geology	4
or GLY 2030C	Environmental and Engineering Geology	3
PHY 2020	Introduction to Principles of Physics	3
or PHY 2004	Applied Physics 1	3

#### Find the academic advisor and website for this major on the <u>CALS website</u>. Offered in Gainesville and through UF Online.

### **ENVIRONMENTAL SCIENCE**

Environmental science is the study of people's roles in our natural systems. Using an interdisciplinary approach, the Environmental Science program approaches complex environmental issues across multiple perspectives. **Environmental Science** students study ecology, soil and water sciences, and natural resource management as well as environmental ethics, economics, policy, and law.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Bachelor of Arts**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
ECO 2013	Macroeconomics	3
ECO 2023	Microeconomics	3
MAC 1147	Precalculus	4
or MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6
PHY 2004	Applied Physics 1	3
or PHY 2020	Introduction to Principles of Physics	3
STA 2023	Introduction to Statistics 1	3
SPC 2608	Introduction to Public Speaking	3

### **Bachelor of Science**

Required GPA = 2.0 overall and 2.5 in the following courses.

Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	<b>General Chemistry 2 and Lab</b>	4
ECO 2013	Macroeconomics	3
ECO 2023	Microeconomics	3
MAC 2311	Analytic Geometry and Calculus 1	4
or MAC 2233	Survey of Calculus 1	3
PHY 2004 & 2004L	Applied Physics 1 and Lab	4
or PHY 2048 & 2048L	Physics with Calculus 1 and Lab	4
or PHY 2053 & 2053L	Physics 1 and Lab	
STA 2023	Introduction to Statistics 1	3

# FAMILY, YOUTH AND COMMUNITY SCIENCES

This social science major prepares students to address predictable human developmental changes, unpredictable events such as natural disasters, and persistent problems such as poverty and nutrition. **Family, Youth and Community Sciences** students study sociology, psychology, and economics as well as advanced topics in youth, family, and community development.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### Family, Youth and Community Sciences

Required GPA = 2.0 overall and 2.5 in the following courses with a C or better in each. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2005 & 2005L	<b>Biological Sciences and Lab</b>	4
ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
PSY 2012	General Psychology	3
STA 2023	Introduction to Statistics 1	3
SYG 2000	Principles of Sociology	3

While not required for admission to the College of Agricultural and Life Sciences, students are strongly encouraged to take the following course at their community/state college:

MAC 1105	Basic College Algebra	3
or MAC 1140	Precalculus Algebra	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

Introduction to Public Speaking	3
Consumer Chemistry	3
Introduction to Principles of Physics	3
Technical Writing	3
Marriage and Family	3
	Consumer Chemistry Introduction to Principles of Physics Technical Writing

# FOOD AND RESOURCE ECONOMICS

Food and Agribusiness Marketing and Management International Food and Resource Economics

Through curriculum and experiential learning, students develop the skills to analyze complex situations such as the allocation of natural resources to meet the needs of people in local, state, national, and global communities. **Food and Resource Economics** students study sales, finance, marketing, management, environmental policy, law, international trade, math and economics.

**Food and Agribusiness Marketing and Management** is designed for students interested in food and fiber systems management, marketing, finance and international business, and sales or managerial positions in agribusiness firms, commercial banks, the Farm Credit Service, insurance and appraisal firms.

**International Food and Resource Economics** provides a broad background in economic theory and international development and policy. Many who choose this specialization are preparing for graduate school or for careers working for international organizations and governments.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### Food and Resource Economics – all specializations

Required GPA = 2.0 overall and 2.0 in the following courses, with a C or better in each. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

ACG 2021	Introduction to Financial Accounting	4
ECO 2013	Macroeconomics	3
MAC 2233	Survey of Calculus 1	3
STA 2023	Introduction to Statistics 1	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

BSC 2005 & 2005L	Biological Sciences and Lab	4
CHM 1083	Consumer Chemistry	3
or PHY 2020	Introduction to Principles of Physics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3

### FOOD SCIENCE

This major uses engineering, biological, and physical sciences to study the nature of foods, the causes of food deterioration, the principles underlying food processing, and the development and improvement of foods for consumption. **Food Science** students study organic and food chemistry, biology, physics, government regulations in the food industry, food engineering, and microbiology.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### Food Science

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
MCB 2000 & 2000L	Microbiology and Lab	4
PHY 2004 & 2004L	Applied Physics 1 and Lab	4
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

### FOREST RESOURCES AND CONSERVATION

Providing students with a solid understanding of ecology, this major prepares students to manage and develop forest areas for economic, recreational, and ecological purposes. **Forest Resources and Conservation** students study natural resource management and analysis, soil and water sciences, plant identification, law and policy, fire management, and natural resource economics.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Forest Resources and Conservation**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
CHM 2045	General Chemistry 1	3
or CHM 1030	Basic Chemistry Concepts and Apps	3
ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
MAC 1105	Basic College Algebra	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

### **GEOMATICS**

#### Geospatial Analysis Surveying and Mapping

The geomatics profession collects, manages, and analyzes geospatial data through ground surveying, photogrammetry, remote sensing, satellite positioning, inertial measurements, echo-sounding, and laser scanning. **Geomatics** students study geometry, statistics, boundary law, and surveying and mapping instrument usage.

**Geospatial Analysis** offers a broader set of courses in Geographic Information Systems (GIS) and 3-D modeling.

**Surveying and Mapping** is accredited by the Accreditation Board for Engineering and Technology and prepares students for entry into the Surveying and Mapping profession.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Geomatics – all specializations**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
MAC 2311	Analytic Geometry and Calculus 1	4
or MAC 1114 & MAC 2233	Trigonometry & Survey of Calculus	6
PHY 2053 & 2053L	Physics 1 and Lab	4
PHY 2054 & 2054L	Physics 2 and Lab	4
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3
COP 2271 & 2271L	<b>Computer Programming for Engineers and Lab</b>	3
or COP 2000	Introduction to Programming	3
or Approved Computer Progr	amming Course (Contact CALS)	

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ENC 2210	Technical Writing	3
----------	-------------------	---

Find the academic advisor and website for this major on the CALS website.

Offered at the Gainesville, Fort Lauderdale, and Plant City locations.

### **MARINE SCIENCES**

From oceans to coastal wetlands, students will learn about marine organisms and their behaviors and interactions with the environment. **Marine Sciences** students study oceanography, statistics, fisheries and aquatic sciences, and invertebrate biodiversity. Students can focus elective courses on ecology, organismal biology, economics, human dimensions, and/or quantitative or professional skills.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Marine Sciences**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4
OCE 1001	Introduction to Oceanography	3
PHY 2004 & 2004L	Applied Physics 1 and Lab	4

The following courses may be completed at the community/state college but are not required for admission to the College of Agricultural and Life Sciences.

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

### MICROBIOLOGY AND CELL SCIENCE

The study of small living organisms, **Microbiology and Cell Science** includes emphasis on molecular biology and genetics; immunology; virology; host-pathogen interactions; cellular ultrastructure; environmental microbiology; and microbial physiology, metabolism, and regulation. Microbiology and Cell Science students also study chemistry, physics, bacterial pathogens, and genetics.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Microbiology and Cell Science**

Required GPA = 2.0 overall and 2.5 in the following courses with a grade of C or better in each, and in no more than two attempts. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4

The following courses may be completed at the community/state college but are not required for admission to the College of Agricultural and Life Sciences, a grade of C or higher is required in each.

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3

#### Find the academic advisor and website for this major on the CALS website.

#### Offered in Gainesville and through UF Online.

### NATURAL RESOURCE CONSERVATION

Conservationists protect and sustain our world's natural resources for future generations. Well-versed in economics and communications, Natural Resource Conservation students are equipped with strong analytical, critical thinking, and interpersonal skills. **Natural Resource Conservation** students study chemistry; biology; ecology; and forest, wildlife, fisheries, and aquatic resources.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Natural Resource Conservation**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
CHM 2045	General Chemistry 1	3
or CHM 1030	Basic Chemistry Concepts and Apps	3
ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
MAC 1105	Basic College Algebra	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

Find the academic advisor and website for this major on the CALS website.

Offered at the Gainesville, Fort Lauderdale and Milton locations.

### **NUTRITIONAL SCIENCES**

The Nutritional Sciences major encompasses all aspects of the consumption and utilization of food by people and animals as well as how these processes affect the health of individuals and populations. **Nutritional Sciences** students study organic chemistry, physics, food science, genetics, nutrition, microbiology, and diseases.

#### **Nutritional Sciences**

Required GPA = 2.0 overall and 2.5 in the following courses. This program is extremely competitive and the above GPA's are <u>MINIMUMS</u> and do not guarantee admission.

Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	General Chemistry 2 and Lab	4
MAC 2311	Analytic Geometry and Calculus 1	4

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2013	Macroeconomics	3
or ECO 2023	Microeconomics	3
ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

### PLANT SCIENCE

The plant science degree provides students with an interdisciplinary perspective on the science of plant production and its applications for managing plants in human and natural systems. Students work with faculty advisors to craft a plan of study that helps them gain expertise in a wide array of potential topics, such as sustainable and organic crop production, plant breeding and genetics, biotechnology, greenhouse and landscape industries, native plant conservation, plant health and protection, soil management and productivity, and turfgrass science.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Plant Science**

Required GPA = 2.0 overall and 2.0 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BOT 2010C	Introductory Botany	3
or BSC 2010 & 2010L	General Biology 1 and Lab	4
BOT 2011C	Plant Diversity	4
or BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
ECO 2013	Macroeconomics	3
MAC 1147	Precalculus	4
or MAC 1140 & MAC 1114	Precalculus Algebra and Trig	6

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3
STA 2023	Introduction to Statistics 1	3

Find the academic advisor and website for this major on the CALS website.

Offered at the Gainesville, Apopka, Milton and Fort Lauderdale locations.

### SOIL, WATER, AND ECOSYSTEM SCIENCES

#### Soil Science Water Science

Soil, Water, and Ecosystem Sciences involves managing land and water resources across a wide range of ecosystems, including agricultural, forested, range, urban and wetlands. Soil, Water, and Ecosystem Sciences students have a strong science and math background and study biology, calculus, microbiology, chemistry, physics, and ecology.

The **Soil Science** specialization includes soil and land use (with an emphasis on natural resources and the environment), environmental management (with an emphasis on agricultural and other applied aspects of soil sciences), physical and biological sciences (with an emphasis on physics, microbiology, botany, and other biological sciences) and business (with an emphasis on policy, economics, business administration, or entrepreneurship).

Water's abundance, quality, distribution, and properties are essential to all people. Understanding water's role in the environment and in our lives is integral to the future of this important resource. **Water Science** is an interdisciplinary specialization that provides students with opportunities to develop skills essential for a diversity of careers in both government and private sectors. Students work closely with advisors to develop a course of study tailored to their professional goals.

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

### Soil, Water, and Ecosystem Sciences - all specializations

Required GPA = 2.0 overall and 2.0 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
or BSC 2005 & 2005L	<b>Biological Sciences and Lab</b>	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	<b>General Chemistry 2 and Lab</b>	4
MAC 2311	Analytic Geometry and Calculus 1	4
PHY 2004 & 2004L	Applied Physics 1 and Lab	4

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

Macroeconomics	3
Microeconomics	3
Technical Writing	3
Analytic Geometry and Calculus 2	4
Introduction to Statistics 1	3
Microbiology and Lab	4
Introduction to Public Speaking	3
	Microeconomics Technical Writing Analytic Geometry and Calculus 2 Introduction to Statistics 1

#### Find the academic advisor and website for this major on the CALS website.

# WILDLIFE ECOLOGY AND CONSERVATION

#### Preprofessional Wildlife Ecology and Conservation

This major focuses on developing students' knowledge of the conservation and management of wildlife and habitats for the greatest aesthetic, ecological, economic, and recreational values. Students in the **Wildlife Ecology and Conservation** major study biology, chemistry, ecology, calculus, soil science, plant taxonomy, entomology, geography, zoology, and sustainability.

**Preprofessional** satisfies the coursework requirements for admission to the Doctor of Veterinary Medicine program. Students pursuing admission to the College of Veterinary Medicine must take six credits of general education composition, nine credits of humanities and six credits of social and behavioral sciences. Some students can also satisfy requirements for certification as an associate wildlife biologist by The Wildlife Society. Certification requirements and application material are available at <a href="https://www.wildlife.org">www.wildlife.org</a>.

**Wildlife Ecology and Conservation** students study in the biological, social, physical and management sciences, and excel at both the scientific and human dimensions of managing wildlife and natural resources. With appropriate choice of electives and course options, graduates satisfy requirements for certification as an associate wildlife biologist with The Wildlife Society. Students select a focus area comprised of four courses (minimum of 12 credits) in one of the following areas: ecology, management, human dimensions, quantitative science or urban and regional planning (combination BS/MS degree program only).

\*Students must complete an Associate of Arts degree, meet the required grade point average (GPA), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

#### **Preprofessional specialization**

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
CHM 2046 & 2046L	<b>General Chemistry 2 and Lab</b>	4
ECO 2023	Microeconomics	3
MAC 2311	Analytic Geometry and Calculus 1	4
STA 2023	Introduction to Statistics 1	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3

#### Wildlife Ecology and Conservation specialization

Required GPA = 2.0 overall and 2.5 in the following courses. Students MUST complete the following courses before transferring (refer to pages 7-8 for course equivalencies):

BSC 2010 & 2010L	General Biology 1 and Lab	4
BSC 2011 & 2011L	General Biology 2 and Lab	4
CHM 2045 & 2045L	General Chemistry 1 and Lab	4
ECO 2023	Microeconomics	3
MAC 2311	Analytic Geometry and Calculus 1	4
STA 2023	Introduction to Statistics 1	3

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ENC 2210	Technical Writing	3
SPC 2608	Introduction to Public Speaking	3

### <u>NOTES</u>