

ORGANISMAL BIOLOGY (Proposed for Spring 2013)
Integrative Biology Formal Option

FRESHMAN YEAR

ENGL 1100 English Comp I	3	ENGL 1120 English Comp II	3
MATH 1610 Calculus I	4	CHEM 1040 Fund. of Chemistry II	3
CHEM 1030 Fund. of Chemistry I	3	CHEM 1040 Fund. of Chem Lab	1
CHEM 1031 Fund. of Chem Lab	1	CORE HISTORY	3
BIOL 1020 Principles of Biology	4	BIOL 1030 Organismal Biology	4
	15		14

SOPHOMORE YEAR

CHEM 2070 Organic Chem I	3	CHEM 2080 Organic Chem II	3
CHEM 2071 Organic Chem I Lab	1	CHEM 2081 Organic Chem II Lab	1
CORE LITERATURE	3	CORE HISTORY OR LIT ¹	3
CORE CORE SOCIAL SCIENCE ²	3	BIOL 3000 Genetics	4
BIOL 3060 Ecology	4	BIOL 3030 Evolution & Systematics	3
	14		14

JUNIOR YEAR

PHYS 1500/1501 Physics I	4	PHYS 1510/1511 Physics II	4
BCHE 5180 Biochemistry I	3	BCHE 5190 Biochemistry II	3
BCHE 5181 Biochemistry I Lab	1	BCHE 5190 Biochemistry II Lab	1
CORE SOCIAL SCIENCE ²	3	CORE SOCIAL SCIENCE OR HUM ³	3
BIOL 3100, 3200, 4010, or 4020⁵	4	CORE HUMANITIES (PHILOSOPHY) ⁴	3
	15	BIOL 4100 Cell Biology	3
			17

SENIOR YEAR

CORE FINE ARTS	3	BIOL 4950 Undergraduate Seminar	1
Eco/Evo/Diversity Electives⁶	7	Cell/Mol/Microbiology Electives⁶	7
Cell/Mol/Microbiology Elective⁶	4	Physiology Elective⁶	4
Biology Elective⁷	3	Biology Elective⁷	4
	17		16

TOTAL HOURS 122

Long-range schedules for COSAM courses are online at www.auburn.edu/cosam/students/

Courses in **BOLD** will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin (www.auburn.edu/bulletin) under Core Curriculum.

¹ Students must complete a two-course sequence in either HIST or LIT (for example, World History 1 and 2 or American Lit 1 and 2). For complete HIST and LIT sequence options, see the Bulletin.

² Students who complete a HIST sequence other than HIST 1010 and 1020 should talk to an advisor about CORE SOC SCI choices.

³ If a LIT sequence is chosen, this course must be a CORE SOCIAL SCIENCE. If a HIST sequence is chosen, this course must be a CORE HUMANITIES.

⁴ Choose from PHIL 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100 or HONRS 1007 or 1017.

⁵ This elective in the junior year should be chosen with consideration of the elective courses to be taken in the senior year. Consult your faculty advisor.

⁶ Approved Biology electives are on the back of this sheet.

⁷ Any BIOL course listed in the Organismal Biology electives may be used as a Biology elective.

Organismal Biology Major Electives

Ecology, Evolution, Biodiversity Electives

Biological Sciences

BIOL	3010	Comparative Anatomy
BIOL	3040	Biology of Marine Systems
BIOL	3075	Introduction to Oceanography
BIOL	3100	Plant Biology
BIOL	3101	Plant Biology Laboratory
BIOL	3200	General Microbiology
BIOL	4010	Invertebrate Biodiversity
BIOL	4020	Vertebrate Biodiversity
BIOL	4395	Marine Faunistic Ecology
BIOL	4425	Marine Fisheries Management
BIOL	4455	Marine Invertebrate Zoology
BIOL	4465	Parasites of Marine Animals
BIOL	4475	Marine Ichthyology
BIOL	4485	Marine Ecology
BIOL	4515	Marine Invertebrate Zoology
BIOL	4525	Dolphins and Whales
BIOL	4535	Coastal Zone Management
BIOL	4495	Comparative Histology of Marine Organisms
BIOL	4545	Coastal Ornithology
BIOL	4565	Marine Vertebrate Zoology
BIOL	4575	Marine Ecology
BIOL	5090	Conservation Biology
BIOL	5110	Parasitology
BIOL	5120	Systematic Botany
BIOL	5140	Plant Ecology
BIOL	5150	Community Ecology
BIOL	5160	Field Biology and Ecology
BIOL	5250	Microbial Evolution and Diversity
BIOL	5300	Plant Anatomy and Development
BIOL	5340	Protozoology
BIOL	5350	Behavioral Ecology
BIOL	5360	Population Ecology
BIOL	5370	Molecular Ecology
BIOL	5380	General Ichthyology
BIOL	5415	Salt Marsh Plant Ecology
BIOL	5425	Marine Botany
BIOL	5435	Coastal Vegetation
BIOL	5455	Marsh Ecology
BIOL	5475	Oceanology of the Gulf of Mexico
BIOL	5495	Marine Protozoology
BIOL	5510	Biogeography

BIOL	5525	Marine Behavioral Ecology
BIOL	5535	Marine Conservation Ecology
BIOL	5550	Wetland Biology
BIOL	5650	Ethology
BIOL	5740	Herpetology
BIOL	5750	Ornithology
BIOL	5760	Mammalogy

Animal & Dairy Sciences

ANSC	4100	Farm Animal Behavior
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Entomology and Plant Pathology

ENTM	4020	Economic Entomology
ENTM	4040	Insects Affecting Humans, Domestic Animals, and Wildlife
ENTM	5030	Insecticides in the Environment
ENTM	5140	Aquatic Insects
ENTM	5150	Arachnology
ENTM	5220	Insect Ecology
ENTM	5300	Systematic Entomology
ENTM	5330	Insect Pest Management
ENTM	5340	Urban Forest Insects
ENTM	5360	Landscape Entomology
ENTM	5370	Urban Entomology
ENTM	5440	Insect Morphology
PLPA	5200	Introductory Mycology

Forestry and Wildlife Science

WILD	4310	Wildlife Management Techniques
WILD	5280	Wildlife Ecology and Management I
WILD	5281	Wildlife Ecology and Management I Lab
WILD	5290	Wildlife Ecology and Management II
WILD	5291	Wildlife Ecology and Management II Lab

Fisheries and Allied Aquaculture

FISH	5220	Water Science
FISH	5320	Limnology

Mathematics

MATH	2660	Topics in Linear Algebra
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Cellular/Molecular/Microbiology Electives

Biological Sciences

BIOL	3020	Genomic Biology
BIOL	3200	General Microbiology

BIOL	4000	Histology
BIOL	4101	Cell Biology Lab
BIOL	4200	Clinical Microbiology
BIOL	4410	Vertebrate Development
BIOL	5130	Advanced Plant Physiology
BIOL	5131	Advanced Plant Physiology Lab
BIOL	5190	Cell and Molecular Signal Transduction
BIOL	5210	Microbial Physiology
BIOL	5220	Introductory Molecular Genetics
BIOL	5230	Virology
BIOL	5250	Microbial Evolution and Diversity
BIOL	5260	Prokaryotic Molecular Genetics
BIOL	5270	Host-Microbe Interactions
BIOL	5320	Plant Gene Expression
BIOL	5465	Marine Microbiology
BIOL	5500	Immunology
BIOL	5501	Immunology Lab
BIOL	5521	Gene Expression and Recombinant DNA Lab
BIOL	5660	Food Microbiology
BIOL	5700	Applied and Environmental Microbiology

Soils and Agronomy

AGRN	5060	Soil Microbiology
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Plant Pathology

PLPA	3000	General Plant Pathology
PLPA	5200	Introductory Mycology

Physiology Electives

Biological Sciences

BIOL	3010	Comparative Anatomy
BIOL	4000	Histology
BIOL	4410	Vertebrate Development
BIOL	5130	Advanced Plant Physiology
BIOL	5131	Advanced Plant Physiology Lab
BIOL	5210	Microbial Physiology
BIOL	5240	Animal Physiology
BIOL	5600	Mammalian Physiology

Animal Sciences

ANSC	3600	Reproductive Physiology
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