CORE remaining_____ **EXPECTED GRADUATION DATE** _____

Franklin College Requirements

Language 1, 2, 3 ___	Biological Science	___	FA/PHY/REL 1 ___	Physical Science	___
FA/PHY/REL 2 ___	Literature	___	Social Science 1 ___	History	___
Social Science 2 ___	Multicultural	___			

Regents/ University of Georgia Requirements

US/Georgia Constitution Requirement	___	Experiential	__		
US/Georgia History Requirement	___	FYOS	__		
Environmental Literacy Requirement	___	120 hours	__		
Cultural Diversity	___	39 hour rule	__		
PEDB	___	Residency Requirement (45/60)	__		

MAJOR REQUIREMENTS: A baccalaureate degree program must require at least 21 semester hours of upper division courses in the major field and at least 39 semester hours of upper division work overall. Students in the Franklin College must earn a grade of "C" (2.0) or better in major courses.

Required Courses (34-36 hours) 10 courses

A minimum grade of "C" (2.0) is required.

- BIOL 1108 (3) or BIOL 2108H (3) and BIOL 1108L (1)
- BCMB 3100 or BCMB 3100H - (4 hrs) - Intro Biochemistry and Molecular Biology **or** BCMB 4020 - (3 hrs) - Biochemistry and Molecular Biology II
- GENE 3200 – (4 hrs) – Genetics or GENE 3200H (4 hrs) – Honors Genetics
- CBIO 3400 or CBIO 3400H – (4 hrs) - Cell Biology **or** CBIO 3600 – (4 hrs) - Developmental Biology or PBIO 3600 – (4 hrs) Plant Cell & Developmental Biology
- ECOL 3500 and 3500L (3+1 hrs) **or** ECOL 3505H/L (4 hrs) Ecology **or** GENE 3000 or GENE 3000H (4 hrs) Evolutionary Biology or PBIO 3650 (4 hrs) Plant Ecology

Laboratory

A minimum grade of "C" (2.0) is required.

Laboratory _____

Choose one course from the following: (3-5 hours)

BCMB 4030/L – (4 hrs) – Bioprocess Technology
BIOL 3110L – (4 hrs) - Basic Skills in the Laboratory
BIOL 3710L – (3 hrs) - Animal Behavior Laboratory
BIOL 3720L – (3 hrs) – Field Animal Behavior
BIOL 4960R – (4 hrs) – Undergrad Research
BIOL(CBIO) 5050/L – (3 hrs) – Electron Microscopy Lab
BTEC(BCMB)PBIO 4000L (4 hrs) Methods Biotechnology
CBIO 3410L– (4 hrs)-Lab in Cellular & Devel Biol
ECOL(BIOL) 3510 – (3-4 hrs) – Ecology Laboratory
ECOL 4070-4070L (4 hrs) Invertebrate Zoology
ECOL(MARS) 4225/L (4 hrs) - Methods in Marine Ecology
ECOL(MARS)4330/L (4 hrs) Tropical Marine Invertebrates
ECOL 4130L – (3 hrs) – Ecological Methodology
GENE 3210L – (3 hrs) – Experimental Genetics
GENE 4210L – (4 hrs) – Molecular Genetics Lab
GENE 4220L – (3 hrs) - Bioinformatics and Modeling Lab
GENE 4230L – (3 hrs) – Evolutionary Biology Lab
GENE 4240L – (3 hrs) - Experimental Microbiome Genetics
MARS 4500 – (3-5 hrs) – Field Study Oceanography & Marine Methods
MIBO 3510L – (3 hrs) – Introductory Microbiology Laboratory
MIBO 4600/L– (4 hrs) – Experimental Microbiology Laboratory
PBIO 3660L – (4 hrs) – Plant Biology Intensive Lab
MARS (PBIO) 4160/L – (4 hrs) – Life and Death in the Salt Marsh

Organismal Biology

A minimum grade of "C" (2.0) is required.

Organismal _____

Choose one course from the following: (3-4 hours)

BIOL(FANR) 3460 or 3460H - Natural History South Pacific
BIOL(WILD)3700 – (3 hrs) – Animal Behavior
CBIO 3000/L – (4 hrs) – Comparative Vertebrate Anatomy
CBIO 3010/L – (4 hrs) – Gross Anatomy
CBIO (PBIO) 4600/L – (4 hrs) – Biology of Protists
ECOL 3220 – (3 hrs) – Biology & Conservation Marine Mammals
ECOL 4050/L – (4 hrs) - Ichthyology
ECOL 4070/L – (4 hrs) – Invertebrate Zoology
ECOL(MARS4330/L (4 hrs) Tropical Marine Invertebrates
ENTO 3140/L – (4 hrs) – Insect Natural History
ENTO 3645 – (3 hrs) – Medical Entomology
ENTO 3650/L – (4 hrs) – Medical Entomology
ENTO 4000/L – (4 hrs) – General Entomology
ENTO 4450 – (3 hrs) – Insect Behavior
MARS 3450 – (3 hrs) – Marine Biology
MIBO 3500 – (3 hrs) – Introductory Microbiology
MIBO 3510L – (3 hrs) - Intro Microbiology Laboratory
MIBO 4110 – (3 hrs) – Plant-Microbe Interactions (Griffin)
PATH(PBIO) 4200/L – (3 hrs) – Introductory Mycology
PBIO 3270 – (3 hrs) - Flowers
PBIO 4650/L – (4 hrs) – Plant Taxonomy
WILD(ECOL) 3580/L– (3/1=4 hrs) – Vertebrate Natural History
WILD(ECOL) 4040/L – (4 hrs) - Herpetology
WILD(BIOL) 4050/L – (4 hrs) – Mammalogy
WILD 4060/L – (3 hrs) – Ornithology
MIBO (POPH)(IDIS) 4450/L – (4 hrs) – Microbial Genetics and Genomics

Biology Major Electives (9 hours minimum) –

A minimum grade of "C" (2.0) is required.

For a total of nine hours, choose three or more courses from the list below. At least two of the courses must be 3 or more credit hours and from two different departments.
PLEASE NOTE: Only ONE semester of research can be used in the Biology major, all other research will count as a general elective.

Major Elective (3+ hours) _____ Major Elective (3+ hours) _____ Major Elective (s) (remaining hours) _____

ANTH(ECOL) 4210 - (4 hrs) - Zoo Archaeology
ANTH(BIOL)(ECOL)(ENTO)(PBIO) 4260/L - (4 hrs) - Natural History Collections Management
ANTH 4300 (4 hrs) - Ethnobotany
ANTH(BIOL)(ECOL)(EETH)(ENTO)(FANR)(GEOL)(PATH)(PBIO) 4261 – (3 hrs) - Museum of Natural History Internship
ANTH(ECOL) 4290 – (3 hrs) – Environmental Archaeology
ANTH 4790 – (3 hrs) - Human Adaptation

BCMB 3100 – (4 hrs) - Intro Biochemistry and Molecular Biology
BCMB(GENE) 3433 – (4 hrs) - Biology for Medicine
BCMB 3600 – (3 hrs) - Genomics and Bioinformatics
BCMB 3600H – (3 hrs) - Genomics and Bioinformatics (Honors)
BCMB 4010 – (4 hrs) - Biochemistry and Molecular Biology I
BCMB 4020 – (3 hrs) - Biochemistry and Molecular Biology II
BCMB 4030/L – (4 hrs) - Bioprocess Technology
BCMB(CHEM) 4110 – (3 hrs) - Physical Biochemistry
BCMB 4120– (4 hrs) - Human Biochemistry and Disease
BCMB 4130 (3 hrs) - Human Biochemistry II
BCMB(ENTO)(BTEC) 4200 - (3 hrs) – Biotechnology

BINF(PBIO) 4550 – (3 hrs) - Bioinformatics Applications

BIOL 3110L – (4 hrs) - Basic Skills in the Laboratory
BIOL(FANR) 3460 or 3460H - Natural History of the South Pacific
BIOL(WILD) 3700 – (3 hrs) - Animal Behavior
BIOL 3710L – (3 hrs) - Animal Behavior Lab
BIOL 3720L – (3 hrs) - Field Animal Behavior
BIOL 4200W or BIOL 4300W (3) – Science Writing options
BIOL 4910 – (1-4 hrs) – Advanced Topics in Biology
BIOL 4960R (4 hrs) - Undergraduate Research in Biology
BIOL(CBIO)(VPAT) 5040 – (3 hrs) - Electron Microscopy
BIOL(CBIO) 5050L – (3 hrs) - Electron Microscopy Laboratory

BTEC(BCMB)(PBIO) 4000L – (4 hrs) - Methods in Biotechnology

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CBIO 3000/L – (4 hrs) – Comparative Vertebrate Anatomy	CBIO 3800 – (4 hrs) – Neurobiology
CBIO 3010/L (4 hrs) – Gross Anatomy	CBIO3800L – (2 hrs) – Neurobiology Laboratory
CBIO 3050 – (3 hrs) – Medical Histology	CBIO(MIBO)(IDIS) 4100 – (3 hrs) - Immunology
CBIO 3200L – (1-3 hrs) - Medical Anatomy	CBIO 4200 or 4200H – (3 hrs) - Biomedical Research in Health and Disease
CBIO 3400 – (4 hrs) - Cell Biology	CBIO 4340 - (3 hrs) - Biology of Aging
CBIO 3410L – (4 hrs) - Lab In Cellular and Developmental Biology	CBIO 4500 – (3 hrs) - Medical Parasitology
CBIO 3600 – (4 hrs) - Developmental Biology	CBIO(PBIO) 4600/L – (4 hrs) - Biology of Protists
CBIO 3710 – (3 hrs) - Principles in Physiology	CBIO 4730 – (3 hrs) - Endocrinology
CBIO 3710L (1 hr) – Human Physiology Lab	CBIO 4320 – (3 hrs) – Stem Cell Biology
CHEM(BCMB) 4190 – (3 hrs) – Introduction ot NMR Spectroscopy	
ECOL 3000/L – (4 hrs) - Introduction to Field Methods	ECOL 4070/L – (4 hrs) - Invertebrate Zoology
ECOL 3100/L – (4 hrs) -Tropical Field Ecology	ECOL 4130L – (3 hrs) - Ecological Methodology
ECOL 3220/L – (4 hrs) - Biology and Conservation of Marine Mammals	ECOL 4150/L – (4 hrs) - Population Biology of Infectious Diseases
ECOL 3500/L – (4 hrs) - Ecology	ECOL 4160 – (4 hrs) - Ecology of North America
ECOL 3505H/L – (4 hrs) - Ecology (Honors)	ECOL(MARS) 4225/L – (4 hrs) - Methods in Marine Ecology
ECOL 3510 – (3-4 hrs) - Ecology Laboratory	ECOL 4240/L – (4 hrs) - Physiological Ecology
ECOL 3530-3530D – (3 hrs) - Conservation Biology	ECOL 4280/L (3/1) – Coral Reef Ecology
ECOL 3600 (3 hrs) - Tropical Ecology: From Organisms to Ecosystems	ECOL(FISH)(WASR) 4310/L – (4 hrs) – Freshwater Ecosystems
ECOL 3820 (3 hrs) – Evolutionary Medicine	ECOL(BIOL)(MARS) 4330/L – (4 hrs) - Tropical Marine Invertebrates
ECOL 3880H – (3 hrs) - Ecosystems of the World (Honors)	ECOL 4500– (3 hrs) - Evolutionary Ecology
ECOL 4000 – (3 hrs) - Population and Community Ecology	ECOL 4540 - (3 hrs) – Behavioral Ecology
ECOL 4010 – (3 hrs) - Ecosystem Ecology	ECOL 4775+L (4 hrs) - Ecological Developmental Biology and Ecotoxicology
ECOL 4050/L – (4 hrs) – Ichthyology	
EHSC(FDST)(MBIO) 4310/L – (4 hrs) - Environmental Microbiology	
ENTO 3140/L – (4 hrs) - Insect Natural History	ENTO 4000/L – (4 hrs) - General Entomology
ENTO 3645 – (3 hrs) - Medical Entomology Lecture	ENTO 4450 – (3 hrs) – Insect Behavior
ENTO 3650/L – (4 hrs) - Medical Entomology	
FDST(MIBO) 4120/L – (3 hrs) - Food Fermentations	
FISH(ECOL)(MARS)(WILD) 4300 – (3 hrs) - Environmental Biology of Fishes	FISH 4500 – (3 hrs) - Fish Physiology
FISH(ECOL) 4360 – (4 hrs) - Fish Ecology	FISH(ECOL)(MARS)(WILD) 4550/L – (4 hrs) - Conservation Aquaculture
GENE 3000 or GENE 3000H– (4 hrs) - Evolutionary Biology	GENE 4240L – (3 hrs) - Experimental Microbiome Genetics
GENE 3210L – (3 hrs) - Experimental Genetics	GENE 4300 – (3 hrs) - Evolutionary Genomics
GENE 3220L (3 hrs) – Genetics Problem Solving Lab	GENE 4310 – (3 hrs) – Genetic Approaches to Developmental Neuroscience
GENE 4000 (3 hrs) – Advanced Evolutionary Biology	GENE 4400 – (3 hrs) – Epigenetic Control and Genetic Instability
GENE 4020W (3 hrs) - Evolution and Climate Change in the Ocean	GENE 4500 – (3 hrs) - Human Genetics
GENE 4200 – (3 hrs) - Advanced Genetics	GENE 4520 (3 hrs) - Genetics of Industrial Micro-Organisms
GENE 4210L – (4 hrs) - Molecular Genetics Lab	GENE(ECOL) 4530 (3 hrs) – Molecular Genetics
GENE 4220L – (3 Hrs) - Bioinformatics and Modeling Laboratory	GENE 4540 (3 hrs) – Cancer Genetics
GENE 4230L – (3 hrs) - Evolutionary Biology Laboratory	GENE 4550 – (3 hrs) – Evolution and Development
HORT (CRSS) 4430 or 4430E– (3 hrs) Plant Physiology	
IDIS(CBIO) 3100 – (3 hrs) - People, Parasites, and Plagues	
KINS 4690-4690L (4 hrs) Neuromuscular Exercise Physiology	KINS 5690 (3 hrs) Skeletal Muscle and Mitochondria Physiology
MARS 3450/L – (4 hrs) - Marine Biology	MARS(FISH) 4380/L (3 hrs) Marine Fisheries Biology
MARS 3550 – (3 hrs) - Life in Fluids	MARS 4500 – (5 hrs) - Field Study in Oceanography and Marine Methods
MARS(PBIO) 4160/L – (4 hrs) - Life and Death in the Salt Marsh	MARS(MIBO) 4620/L – (3 hrs) - Microbial Ecology
MARS 4200 – (3 hrs) - Chemical and Biological Oceanography	MARS 4810 – (3 hrs) – Global Biogeochemical Cycles
MIBO 3500 or MIBO 3500E or MIBO 3500H (3 hrs) - Introductory Microbiology	MIBO 4300– (3 hrs) - Genome Editing in Mammals, Plants, Insects, and Microbes
MIBO 3500L (1) – Introductory Microbiology Lab I	MIBO 4500– (3 hrs) -Bacterial Symbioses
MIBO 3510L– (3 hrs) - Introductory Microbiology Lab II	MIBO 4600L – (4 hrs) - Experimental Microbiology Laboratory
MIBO 4090 or 4090E– (3 hrs) - Prokaryotic Biology	MIBO 4700 – (3 hrs) - Medical Mycology
MIBO(POPH) 4220 or 4220S (3 hrs) - Pathogenic Bacteriology	
POPH (MIBO)(IDIS) 4650 or 6650 – (3 hrs) – Introduction to Virology	
PATH (ANTH)(PBIO) 3010 – (3 hrs) - Fungi: Friends and Foes	PATH(PBIO) – 4200/L – (3 hrs) - Introductory Mycology
PBIO 3270 – (3 hrs) – Flowers	PBIO(GENE)(PATH) 4510 – (3 hrs) – Genome Evolution Across the Tree of Life
PBIO 3600 – (4 hrs) – Plant Cell and Developmental Biology	PBIO (ECOL) 4520 – (3 hrs) – Plant-Animal Interactions
PBIO 3650 – (4 hrs) – Plant Ecology	PBIO 4640/L – (3 hrs) – Botanical Illustration
PBIO 3660L – (4 hrs) – Plant Biology Intensive Laboratory	PBIO 4650/L – (4 hrs) – Plant Taxonomy
PBIO 4500 – (3 hrs) – Introduction to Gene Technology	PBIO 4720 (4 hrs) – Plant Variation & Evolution
PBIO 3100	PBIO(ECOL) 4750 – (3 hrs) - Tropical Ecology and Conservation
POPH(MIBO) 4651 – (3 hrs) – RNA Virus Genomic Diversity	
PMCY 3000 – (4 hrs) – Human Physiology	PMCY 4000 – (3 hrs) – The War on Cancer
POUL(BIOL) 4060 – (3 hrs) - Reproductive Endocrinology	POUL 4150 – (3-6 hrs) – Field Study in Avian Biology
PSYC 4120 – (3 hrs) - Sensation and Perception	PSYC 4150 – (3 hrs) – Biological Foundations of Health Psychology
PSYC 4130 – (3 hrs) - Physiological and Comparative Psychology	PSYC 5850 – (3 hrs) – Psychopharmacology – Drugs and Behavior
PSYC 4140 – (3 hrs) - Cognitive Neuroscience	
VPAT 3100H (3 hrs) Introduction to Disease	VPAT 4000 – (3 hrs) – On the Origins of Disease
VPHY 3100 – (3 hrs) – Elements of Physiology	VPHY 4200 – (3 hrs) – Physiologic Basis of Diseases
VPHY 3107 – (4 hrs) – Integrative Concepts in Physiology I	VPHY 4300 – (3 hrs) – Endocrine Physiology
VPHY 3108 – (3 hrs) – Integrative Concepts in Physiology II	VPHY 4600 – (3 hrs) – Physiological Toxicology
WILD(ECOL) 3580/L – (3/1=4 hrs) – Vertebrate Natural History	WILD 4060/L – (3 hrs) – Ornithology
WILD(ECOL) 4040/L – (4 hrs) – Herpetology	WILD (ECOL) 4575-4575L – (6 hrs) – Conservation Medicine
WILD(BIOL) 4050/L – (4 hrs) - Mammalogy	WILD 5200 – (2-6 hrs) – International Issues in Wildlife Conservation

Effective January 2025