Required Courses (34-36 hours) 10 courses

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

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

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

- BCM-Biological Science
- FA/PHY/REL - Physical Science
- FA/PHY/REL - Literature
- Social Science - History
- Social Science - Multicultural

BIOL 1108 (3) and BIOL 1108L (1) or BIOL 2108H (3) and BIOL 2108L (1)
BCMB 3100 - Intro Biochemistry and Molecular Biology or BCMB 4020 - Biochemistry and Molecular Biology
GENE 3200 - Genetics or GENE 3280H - Honors Genetics
CBIO 3400 - Cell Biology or CBIO 3600 - Developmental Biology or PBIO 3600 - Plant Cell & Developmental Biology
ECOL 3500L - Ecology or ECOL 3505H/L - Ecology Honors or GENE 3000 or GENE 3000H - Evolutionary Biology or PBIO 3650 (4 hrs) Plant Ecology

Core remaining

Franklin College Requirements

- BIOL 3110L - Laboratory
- BIOL 3710L - Laboratory
- BCM-Biological Science
- FA/PHY/REL - Physical Science
- FA/PHY/REL - Literature
- Social Science - History
- Social Science - Multicultural

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.

BIOL 1108 (3) and BIOL 1108L (1) or BIOL 2108H (3) and BIOL 2108L (1)
BCMB 3100 - Intro Biochemistry and Molecular Biology or BCMB 4020 - Biochemistry and Molecular Biology
GENE 3200 - Genetics or GENE 3280H - Honors Genetics
CBIO 3400 - Cell Biology or CBIO 3600 - Developmental Biology or PBIO 3600 - Plant Cell & Developmental Biology
ECOL 3500L - Ecology or ECOL 3505H/L - Ecology Honors or GENE 3000 or GENE 3000H - Evolutionary Biology or PBIO 3650 (4 hrs) Plant Ecology

**Core remaining**

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

**Expected Graduation Date**

- US/Georgia Constitution Requirement
- US/Georgia History Requirement
- Environmental Literacy Requirement
- Cultural Diversity
- Residency Requirement (45/60)

**Required Courses (34-36 hours) 10 courses**

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

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

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

- BCM 4030/L - Lab Techniques in BCM
- BIOL 3110L - Basic Skills in the Laboratory
- BIOL 3710L - Animal Behavior Laboratory
- BIOL 3720L - Field Animal Behavior
- BIOL 4960 or BIOL 4960H - Undergrad Research
- CBIO 5050/L - Electron Microscopy Lab
- BTEC(BCM/B)PBIO 4000/L - Methods Technology
- CBIO 3410/L - Lab in Cellular & Devel Biol
- ECOL(BIOL) 3510 - Ecology Laboratory
- ECOL 4070-4070L - Invertebrate Zoology
- ECOL(MARS) 4225/L - Methods in Marine Ecology
- ECOL(MARS) 4330/L - Tropical Marine Invertebrates
- GENE(BIOL) - Experimental Genetics
- GENE(GENE) 4210/L - Molecular Genetics Lab
- GENE 4220L - Bioinformatics and Modeling Lab
- GENE 4230L - Evolutionary Biology Lab
- MARS 4500 - Field Study Oceanography & Marine Methods
- MIBO 3510L - IntroMicrobiology Laboratory
- MIBO 3510H - Intro Microbiology Lab Honors
- MIBO 4600L - Experimental Microbiology Laboratory
- MIBO 4710L - Medical Mycology Laboratory
- PBIO(BIOL) 3660L - Plant Biology Intensive Lab

**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)**

- ANTH(ECOL) 4210 - Zoo Archaeology
- ANTH(BIOL)(ECOL)(ENTO)(PBIO) 4260/L - Natural History Collections Management
- ANTH 4300 - Ethnobotany
- BCMB 3100 - Intro Biochemistry and Molecular Biology
- BCMB(GENE) 3433 - Biology for Medicine
- BCMB 3600 - Genomics and Bioinformatics
- BCMB 3600H - Genomics and Bioinformatics (Honors)
- BCMB 4010 - Biochemistry and Molecular Biology
- BCMB 4020 - Biochemistry and Molecular Biology
- BCMB 4030/L - Lab Techniques in Biochemistry and Molecular Biology
- BCMB(CHEM) 4110 - Physical Biochemistry
- BCMB 4130 or BCMB 4130H - Mechanisms of Human Disease
- BCMB(ENTO)(BTEC) 4200 - Biotechnology

**BIOL 3110L - Basic Skills in the Laboratory**

- BIOL(FANR) 3460 or 3460H - Natural History of the South Pacific
- BIOL(WILD) 3700 - Animal Behavior
- BIOL 3710L - Animal Behavior Lab
- BIOL 3720L - Field Animal Behavior
- BTEC(BCM/B)PBIO 4000/L - Methods in Biotechnology

**Major Elective (3+ hours)**

- Biol(FANR) 3460 or 3460H - Natural History of the South Pacific
- Bio(WILD) 3700 - Animal Behavior
- BIOL 3710L - Animal Behavior Lab
- BIOL 3720L - Field Animal Behavior

**Major Elective(s) (remaining hours)**

- ANTH(ECOL) 4290 - Environmental Archaeology
- ANTH 4790 - Human Adaptation
- BCMB 4030/L - Lab Techniques in Biochemistry and Molecular Biology
- BTEC(BCM/B) 4200 - Biotechnology
- BCMB 4130 or BCMB 4130H - Mechanisms of Human Disease
- BCMB(ENTO)(BTEC) 4200 - Biotechnology
- BIO 4910 - Advanced Topics in Biology
- BIO 4960 or BIO 4960H - Undergraduate Research in Biology
- BIOL(BIOL)(VPAT) 5040 - Electron Microscopy Lab
- BIOL(BIOL) 5050L - Electron Microscopy Laboratory

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CBIO 3000/L – (4 hrs) - Comparative Vertebrate Anatomy  
CBIO 3010/L - (4 hrs) - Gross Anatomy  
CBIO 3050 – (3 hrs) - Medical Histology  
CBIO 3200 – (1-3 hrs) - Medical Anatomy  
CBIO 3400 – (4 hrs) - Cell Biology  
CBIO 3410L – (4 hrs) - Lab In Cellular and Developmental Biology  
CBIO 3600 – (4 hrs) - Developmental Biology  
CBIO 3710 – (3 hrs) - Principles in Physiology  
CHEM(BCMB) 4190 – (3 hrs) - Introduction of NMR Spectroscopy  
CRSS (ECOL) 4563 – (3 hrs) - Genotoxicology of Radiouclides & contaminants  
CRSS(HORT)(ECOL) 4590 – (3 hrs) - Soil Fertility and Plant Nutrition  
ECOL 3000/L – (4 hrs) - Introduction to Field Methods  
ECOL 3100/L – (4 hrs) - Tropical Field Ecology  
ECOL 3220/L – (4 hrs) - Biology and Conservation of Marine Mammals  
ECOL 3500/L – (4 hrs) - Ecology  
ECOL 3505H/L – (4 hrs) - Ecology (Honors)  
ECOL 3510 – (3-4 hrs) - Ecology Laboratory  
ECOL 3530-3530D – (3 hrs) - Conservation Biology  
ECOL 3600 (3 hrs) - Tropical Ecology: From Organisms to Ecosystems  
ECOL 3820 (3 hrs) – Evolutionary Medicine  
ECOL 3880H – (3 hrs) - Ecosystems of the World (Honors)  
ECOL 4000 – (3 hrs) - Population and Community Ecology  
ECOL 4010 – (3 hrs) - Ecosystem Ecology  
EHSC(FDST)(MBIO) 4310/L – (4 hrs) - Environmental Microbiology  
ENTO 3140/L – (4 hrs) - Insect Natural History  
ENTO 3645 – (3 hrs) - Medical Entomology Lecture  
ENTO 3655/L – (4 hrs) - Medical Entomology  
FDST(MBIO) 4120/L – (3 hrs) - Food Fermentations  
FISH(ECOL)(MARS)(WILD) 4300 – (3 hrs) - Environmental Biology of Fishes  
FISH(ECOL) 4360 – (4 hrs) - Fish Ecology  
GENE 3000 or GENE 3000H – (4 hrs) - Evolutionary Biology  
GENE 3210L – (3 hrs) - Experimental Genetics  
GENE 3220L – (3 hrs) - Genetics Problem Solving Lab  
GENE 4020W – (3 hrs) - Evolution and Climate Change in the Ocean  
GENE 4050 – (3 hrs) - Evolution and Climate Change in the Ocean  
GENE 4070 – (3 hrs) - Evolutionary Medicine  
GENE 4210L – (4 hrs) - Molecular Genetics Lab  
GENE 4220L – (3 Hrs) - Bioinformatics and Modeling Laboratory  
GENE 4230L – (3 hrs) - Evolutionary Biology Laboratory  
GENE 4300 – (3 hrs) - Evolutionary Genomics  
GENE 4310 – (3 hrs) - Genetic Approaches to Developmental Neuroscience  
GENE 4400 – (3 hrs) - Epigenetic Control and Genetic Instability  
GENE 4500 – (3 hrs) - Human Genetics  
GENE 4550 – (3 hrs) - Evolution and Development  
GEOG(POPH) 4220 – (3 hrs) - Ecological Biogeography  
HORT (CRSS) 4430 – (3 hrs) Plant Physiology  
IDIS(CBIO) 3100 – (3 hrs) - Parasite, Parasites, and Plagues  
KINS 4690-4690L (4 hrs) - Neuromuscular Exercise Physiology  
MARS 3450/ L – (4 hrs) - Marine Biology  
MARS 3550 – (3 hrs) - Life in Fluids  
MARS(PBIO) 4160/L – (4 hrs) - Life and Death in the Salt Marsh  
MARS 4200 – (3 hrs) - Chemical and Biological Oceanography  
MIBO 3500 or MIBO 3500E – (3 hrs) - Introductory Microbiology  
MIBO 3510L or MIBO 3510H – (3 hrs) - Introductory Microbiology Lab  
MIBO 4090 or 4090E – (3 hrs) - Prokaryotic Biology  
MIBO 4110 – (3 hrs) - Plant Microbe Interactions (Griffin only)  
MIBO(POPH) 4220 or 4220S (3 hrs) - Pathogenic Bacteriology  
PATH(ANTH)(PBIO) 3010 – (3 hrs) - Fungi: Friends and Foes  
PBHO 3270 – (3 hrs) - Flowers  
PBHO 3600 – (4 hrs) - Plant Cell and Developmental Biology  
PBHO 3650 – (4 hrs) - Plant Ecology  
PBHO 3660L – (4 hrs) - Plant Biology Intensive Laboratory  
PBHO 4500 (3 hrs) - Introduction to Gene Technology  
PMCY 3000 – (4 hrs) - Human Physiology  
POPH(MIBO)(IDIS) 4450/L – (4 hrs) - Microbial Genetics and Genomics  
POUL(BIOL) 4060 – (3 hrs) - Reproductive Endocrinology  
PSYC 4120 – (3 hrs) - Sensation and Perception  
PSYC 4130 – (3 hrs) - Physiological and Comparative Psychology  
PSYC 4140 – (3 hrs) - Cognitive Neuroscience  
PSYC 4150 – (3 hrs) - Biological Foundations of Health Psychology  
VPAT 3100H (3 hrs) - Introduction to Disease  
VPHY 3100 – (3 hrs) - Elements of Physiology  
WILD(ECOL) 3580L – (3/1=4 hrs) - Vertebrate Natural History  
WILD(ECOL) 4040/L – (4 hrs) - Herpetology  
WILD(BIOL) 4050/L – (4 hrs) - Mammalogy  
CRSS(MBIO) 4610/L – (3 hrs) - Soil Microbiology  
ECOL 4050/L – (4 hrs) – Ichthyology  
ECOL 4070/L – (4 hrs) - Invertebrate Zoology  
ECOL 4130L – (3 hrs) - Ecological Methodology  
ECOL 4150/L – (4 hrs) - Population Biology of Infectious Diseases  
ECOL 4160 - (4 hrs) - Ecology of North America  
ECOL(MARS) 4225/L – (4 hrs) - Methods in Marine Ecology  
ECOL 4240/L – (4 hrs) - Physiological Ecology  
ECOL(FISH)(WASR) 4310/L – (4 hrs) - Freshwater Ecosystems  
ECOL(BIOL)(MARS) 4330/L – (4 hrs) - Tropical Marine Invertebrates  
ECOL 4500 – (3 hrs) - Evolutionary Ecology  
ENTO 4000/L – (4 hrs) - General Entomology  
ENTO 4450 – (3 hrs) - Insect Behavior  
GEOG(PBIO) 4240 – (3 hrs) - Plant Geography  
PATH(PBIO) – 4200/L – (3 hrs) - Introductory Mycology  
PBHO(GENE)(PATH) 4510 – (3 hrs) - Genome Evolution Across the Tree of Life  
PBHO(BIOL)(BINF) 4550 – (3 hrs) - Bioinformatics Applications  
PBIO 4640/L – (3 hrs) - Botanical Illustration  
PBIO 4650/L – (4 hrs) - Plant Taxonomy  
PBHO(ECOL) 4750 – (3 hrs) - Tropical Ecology and Conservation  
PMCY 4000 – (3 hrs) - The War on Cancer  
POPH(MIBO)(IDIS) 4651 – (3 hrs) - RNA Virus Genomic Diversity  
POUL(BIOL) 4150 – (3-6 hrs) Field Study in Avian Biology  
PSYC 5570 – (3 hrs) - Principles of Primate Phylgeny  
PSYC 5580 – (3 hrs) - Psychopharmacology – Drugs and Behavior  
WILD 4060/L – (3 hrs) – Ornithology  
WILD(ECOL) 4575-457L – (6 hrs) – Conservation Medicine  
WILD 5200 (2-6 hrs) International Issues in Wildlife Conservation  
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