BACHELOR OF SCIENCE WITH A BIOLOGY MAJOR

Bachelor of Science with a Biology Major Curriculum Requirements

First-Year Gateway Experience
GFCL 100 Global Foundations of Character and Leadership
GFOB 100 Global Foundations of Organizations and Business
WRIT 106 Writing Workshop
IDEA 101 Bryant IDEA: Innovation and Design Experience For All

Biology Degree Core Requirements

SCI 251 & SCI L251 Biology I Principles of Biology and Biology I Laboratory
SCI 253 & SCI L253 Biology II Organismal Biology and Biology II Laboratory
SCI 265 & SCI L265 Chemistry I Introductory Chemistry and Chemistry I Laboratory
SCI 267 & SCI L267 Chemistry II Chemical Systems and Chemistry II Laboratory
SCI 264 Physics I Introductory Physics

Level II and III:
Choose one of the following tracks: Optional - Self design track with faculty advisor.

Track 1: General Biology
SCI 365 & SCI L365 Organic Chemistry I and Organic Chemistry I Laboratory

Choose 4 of the following courses plus one lab, at least one course must be at the 400-level
SCI 351 Ecology
& SCI L351 and Ecology Laboratory
SCI 354 Nutrition
SCI 356 Introduction to Biotechnology
SCI 360 & SCI L360 Anatomy and Physiology I and Anatomy and Physiology Laboratory I (*)
SCI 362 Nobel Prize in Biological Sciences
SCI 363 Genetics
& SCI L363 and Genetics Laboratory
SCI 364 Plant Biology
SCI 366 Coastal Environments
SCI 367 Biochemistry
SCI 368 Elements of Forensic Science
SCI 369 Histology
SCI 374 & SCI L374 Organic Chemistry II and Organic Chemistry II Laboratory
SCI 377 Microbiology
& SCI L377 and Microbiology Laboratory
SCI 380 & SCI L380 Anatomy and Physiology II and Anatomy and Physiology Lab II (*)
SCI 390 Research Methods in Science
SCI HS300 Honors Special Topics in Science Application of Brain Science

SCI ST300 Special Topics in Science and Technology
SCI 450 Biological Imaging
SCI 451 Instrumental Analysis for Environmental and Life Sciences
SCI 457 Environmental Toxicology and Risk Assessment
SCI 459 Foundations in Pharmaceutical Science
SCI 461 Issues in Biological Science
SCI 462 Plant Diversity in Ancient and Modern Environments
SCI 464 Biomarkers and isotope Signals
SCI 466 Global Health Challenges
SCI 470 Immunity and Disease
SCI 473 Computer Programming for the Sciences
SCI 490 Research Directed Study in Science

Track 2: Cellular and Molecular Biology

Level II:
SCI 356 Introduction to Biotechnology
SCI 360 & SCI L360 Anatomy and Physiology I and Anatomy and Physiology Laboratory I (*)
SCI 362 Nobel Prize in Biological Sciences
SCI 363 Genetics
& SCI L363 and Genetics Laboratory
SCI 367 Biochemistry
SCI 369 Histology
SCI 374 & SCI L374 Organic Chemistry II and Organic Chemistry II Laboratory
SCI 377 Microbiology
& SCI L377 and Microbiology Laboratory
SCI 380 & SCI L380 Anatomy and Physiology II and Anatomy and Physiology Lab II (*)
SCI 390 Research Methods in Science
SCI HS300 Honors Special Topics in Science Application of Brain Science

SCI ST300 Special Topics in Science and Technology

Level III:
Choose one of the following courses
SCI 450 Biological Imaging
SCI 451 Instrumental Analysis for Environmental and Life Sciences
SCI 459 Foundations in Pharmaceutical Science
SCI 466 Global Health Challenges
SCI 470 Immunity and Disease
SCI 473 Computer Programming for the Sciences
SCI 490 Research Directed Study in Science

Track 3: Pre-Health

Biology core plus the following Level I course
SCI 274 Physics II Biological Physics

**Level II:
Bachelor of Science with a Biology Major

SCI 365 & SCI L365: Organic Chemistry I and Organic Chemistry I Laboratory
SCI 367: Biochemistry

Choose 2 of the following courses including one lab:

SCI 354: Nutrition
SCI 360 & SCI L360: Anatomy and Physiology I and Anatomy and Physiology Laboratory I (*)
SCI 363 & SCI L363: Genetics and Genetics Laboratory
SCI 369: Histology
SCI 374 & SCI L374: Organic Chemistry II and Organic Chemistry II Laboratory
SCI 377 & SCI L377: Microbiology and Microbiology Laboratory
SCI 380 & SCI L380: Anatomy and Physiology II and Anatomy and Physiology Lab II (*)
SCI 390: Research Methods in Science
SCI HS300: Honors Special Topics in Science Application of Brain Science
SCI ST300: Special Topics in Science and Technology Emergency Medical Technician [EMT] Basic

Level III:

Choose one of the following courses:

SCI 459: Foundations in Pharmaceutical Science
SCI 466: Global Health Challenges
SCI 470: Immunity and Disease
SCI 490: Research Directed Study in Science

*Recommended to be taken together with the lab.

**Students are encouraged to review individual course requirements for each track and take the appropriate class sequence.

Track 4: Ecology and Conservation Biology

Level II:

SCI 351 & SCI L351: Ecology and Ecology Laboratory

Choose 3 of the following courses plus one lab:

SCI 363 & SCI L363: Genetics and Genetics Laboratory
SCI 364: Plant Biology
SCI 366: Coastal Environments
SCI 371 & SCI L371: Human Impact on Land and Life and Human Impact on Land and Life Laboratory
SCI 372 & SCI L372: Sustaining Air and Water and Sustaining Air and Water Laboratory
SCI 377 & SCI L377: Microbiology and Microbiology Laboratory
SCI 390: Research Methods in Science
SCI ST300: Special Topics in Science and Technology Emergency Medical Technician [EMT] Basic

Level III:

Choose one of the following:

SCI 450: Biological Imaging
SCI 454: Conservation in the U.S. and China
SCI 455: Environmental Policy: Decision Making and Problem Solving
SCI 457: Environmental Toxicology and Risk Assessment

SCI 458: Global Change and Geochemical Impact
SCI 461: Issues in Biological Science
SCI 462: Plant Diversity in Ancient and Modern Environments
SCI 464: Biomarkers and isotope Signals
SCI 473: Computer Programming for the Sciences
SCI 490: Research Directed Study in Science
SCI ST400: Special Topics in Science Environmental Investigation and Remediation

Track 5: Research Intensive

Level II:

SCI 365 & SCI L365: Organic Chemistry I and Organic Chemistry I Laboratory
SCI 390: Research Methods in Science

Choose 2 of the following courses plus one lab

SCI 351: Ecology
SCI 356: Introduction to Biotechnology
SCI 363 & SCI L363: Genetics and Genetics Laboratory
SCI 364: Plant Biology
SCI 367: Biochemistry
SCI 369: Histology
SCI 374 & SCI L374: Organic Chemistry II and Organic Chemistry II Laboratory
SCI 377 & SCI L377: Microbiology and Microbiology Laboratory
SCI HS300: Honors Special Topics in Science Application of Brain Science
SCI ST300: Special Topics in Science and Technology Emergency Medical Technician [EMT] Basic

Liberal Arts Core Requirements

ECO 113: Microeconomic Principles
ECO 114: Macroeconomic Principles
LCS 121: Introduction to Literary Studies
MATH 121: Calculus and Analytic Geometry I
MATH 122: Calculus and Analytic Geometry II
MATH 201: Statistics I

Two Humanities Survey Courses

Liberal Arts Distributions - Modes of Thought

Two Social Science Modes of Thought
One Historical Mode of Thought (Upper Division)
One Literary Mode of Thought (Upper Division)
Two Scientific Modes of Thought

Business Minor Requirement


Electives
Subject to programmatic constraints, students may elect to take additional business courses beyond the required minor, not to exceed a combined total of 30 credit hours in the College of Business.

1 Modes of Thought requirements can be met by appropriate courses in the major.

2 Include one Lab Science. One science must be taken at the 300 or 400 level.

A minimum of 122 credit hours is required for graduation.