

# 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
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Choose 4 of the following courses plus one lab, at least one course must be at the 400-level

SCI 351 & SCI L351	Ecology 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 & SCI L363	Genetics 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 & 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
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 365 & SCI L365	Organic Chemistry I and Organic Chemistry I Laboratory
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Choose 3 of the following courses plus one lab:

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 & SCI L363	Genetics and Genetics Laboratory
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 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 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
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\*\*Level II:

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
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**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

**Level III:**

SCI 490	Research Directed Study in Science
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**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**<sup>1</sup>

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**

Selection is made from a variety of business minors (Business Administration, Entrepreneurship, Finance, Global Supply Chain Management, Human Resource Management, Information Systems, International Business, Management, Marketing, Marketing Analytics, and Sales).

**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.

<sup>1</sup> Modes of Thought requirements can be met by appropriate courses in the major.

<sup>2</sup> 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