

Mathematics and Science Department

Faculty

Dr. Stafford, Chair

Mathematics Faculty: Mrs. Hastings, Dr. Liu, Mrs. Ross

Science Faculty: Dr. Amos, Mr. Burke, Mr. Chandler, Mr. Coffman

Biology (BS)

Dr. Stafford, Program Coordinator

Aims of Biology

Graduates of the Biology Degree will be prepared for careers in the biological sciences, and advanced study in professional and graduate schools. Biology Majors will have a broad, foundational knowledge of biological theory and practices as well as strong content knowledge in the general biology discipline. These knowledge bases should prepare graduates well for work in commercial industries, non-profit research organizations, medical research laboratories, national laboratories, environmental survey companies, and graduate programs.

This degree program is highly structured; therefore, students should carefully follow the scheduling of the applicable four-year plan to avoid extending the time required for degree completion. The Department Chairpersons must approve any alternative coursework. All alternative coursework must closely align with Florida College course requirements to be considered for approval.

General Requirements

Entrance Requirements

All students who meet the general admittance criteria for the college are eligible to declare Biology as their chosen major of study.

Total Semester Hours

Students planning for the bachelor's degree with a Biology major must complete a total of 122 semester hours of accredited college work, with a total of 41 hours at the 3000 or 4000 level. Physical Education activities courses will not be counted toward the 123-hour total; courses taken under the pass-fail option will not apply toward the 41-hour total.

General Education Requirements

Complete the 36 hours of General Education core course requirements including natural science and the physical education requirement.

Language Requirement

There is no foreign language requirement, but two semesters of foreign language are possible. Students interested in taking a foreign language should talk with their advisor to arrange an academic plan accordingly.

Quality of Work

- 2.25 GPA or higher
- An overall GPA of at least 2.5 in the biology core and major courses
- A grade of "C" or better for required courses (except for daily Bible courses)

Daily Bible Requirement

All students must take a Biblical Literature course each day that they take classes on the Florida College campus. Campus resident students must take a Bible course each day.

Residency

Students must complete 28 hours of their upper division major courses at Florida College.

Graduation Ceremony

Candidates for the Bachelor of Science degree in Biology must participate in Commencement in the year of completing their other requirements. Any exceptions must be cleared with the Registrar.

Lower-Division General Education Courses (minimum of 36 credit hours and daily Bible credit hours 48 total)

AMH 2020	American History (3) or equivalent social science
ENC 1101	English Composition Skills I (3)
ENC 1102	English Composition Skills II (3)
HLP 2081	Health and Wellness (1)
Humanities	Humanities credit (3)
LIT 2371	OT Poetry & Wisdom (Humanities credit) (3)
STA 2023	Elementary Statistics (3)
MAC 1147	Pre-calculus Algebra and Trigonometry (4)
PSY 1012	General Psychology (3)
SYG 2011	Sociology (3) or equivalent behavioral science
SPC 1608	Public Speaking (3)
MAC 1105	College Algebra (3)
Physical Education Courses	(1)
Daily Bible course for each semester	(12)

Lower-Division Biology Courses Required for Biology Major (40 credit hours)

BSC 2010C/L	Biological Processes and Lab I (4)
BSC 2011C/L	Biological Processes and Lab II (4)
CHM 1045C/L	General Chemistry and Lab I (4)
CHM 1046C/L	General Chemistry and Lab II (4)
PHY 1053C/L	General Physics and Lab I (4)
PHY 1054C/L	General Physics and Lab II (4)
CHM 2210C/L	Organic Chemistry and Lab I (4)
CHM 2211C/L	Organic Chemistry and Lab II (4)
MAC 2311	Calculus with Analytic Geometry I (4)
MAC 2312	Calculus with Analytic Geometry II (4)

Upper-Division Biology Courses Required for Major (34 credit hours + Bible hours)

BCH 3023	Introduction to Biochemistry (3)
PHI 3633	Introduction to Biomedical Ethics (3)
PCB3063	Genetics (3)
PCB 3063L	Genetics Lab (2)
MCB 3020	Microbiology (3)
MCB 3020L	Microbiology Lab (1)
PCB 3023	Cell Biology (3)
PCB 4843	Behavioral Neuroscience (3)
PCB 4843L	Neurophysiology Lab (2)
BSC 4930	Special Topics in Biology Seminar (3)
PCB 4043C/L	General Ecology and Lab (4)
BSC 3933	Special Topics Nutrition (3)

MCB 4503 Virology (3)
 BSC 4910 Research Experience (3)

Daily Bible course for each semester/Weekly Bible class during capstone experience semester

RECOMMENDED PLAN FOR Biology Degree (125 hours)

Fall - Year One	Hours	Spring - Year One	Hours
ENC 1101 - Freshman Composition I	3	ENC 1102 - Freshman Composition II	3
MAC 1147 - Pre-calculus Trigonometry	4	PE Course	1
CHM 1045C - General Chemistry & QA I	4	CHM 1046C - General Chem & QA II	4
REL 1210 - History & Geography: OT	2	REL 1240 - History & Geography: NT	2
BSC 2010C - Bio 1 with Lab	4	BSC 2011C - Biology II with Lab	4
REL 1273 - Biblical Worldview	1	Bible	1
Total	17	Total	15
Fall - Year Two	Hours	Spring - Year Two	Hours
Social Science	3	Behavioral Science II	3
CHM 2210C - Organic Chemistry I	4	CHM 2211C - Organic Chemistry II	4
PSY 1012 - General Psychology	3	HLP 2081 - Health and Wellness	1
MAC 2311 - Calculus 1	4	LIT 2371 - OT Poetry & Wisdom Lit.	3
Bible	2	STA 2023 - Statistics	3
Bible	1	Bible	1
Total	17	Total	15
Fall - Year Three	Hours	Spring - Year Three	Hours
BSC 3023 - Intro to Biochemistry	3	PCB 3063L - General Genetics Lab	2
PCB 4043C - Ecology w/ Lab	4	PHI 3633 - Intro to Biomedical Ethics	3
PCB 3063 - Genetics	3	PCB 3023 - Cell Biology	3
PHY 1053C - General Physics	4	PHY 1054C - General Physics II	3
Bible	2	Bible	2
Total	16	Total	14
Fall - Year Four	Hours	Spring - Year Four	Hours
PCB 4843 - Neurophysiology	3	MCB 3020C - Microbiology w/ Lab	4
MCB 4503 - Virology	3	BSC 4930 - Senior Seminar	3
PCB 4234 - Immunology	3	BSC 3933 - Nutrition	3
SPC 1608 - Public Speaking	3	Humanities II	3
Bible	2	Bible	2
Total	14	Total	13