

Georgia Southwestern State University

STORM TRACKS

Department of Biology

B.S. in Biology (all paths)

YEAR 1		
Fall Term 1		
Course	Credits	✓
Field of Study: CHEM 1211 w/1211L	4	
Writing: (ENGL 1101 req)	3	
Mathematics: (=>MATH 1113)	3	
UNIV 1000 (grd.req.)	1	
Field of Study: BIOL 1221 - 1st-yr Bio.Sem. (req.)	1	
Option		
ST/FED: PEDS 2000 (grd req)	2	
OR **Field of Study:BIOL 1222 – Intr Research (students with STEM AP)		
Semester Total Hours	14	
Spring Term 2		
Field of Study:CHEM 1212 w/ 1212L	4	
Writing: (ENGL 1102 req)	3	
Institution: (CIS 1000 recommended)	3	
Social Sci: (choice)	3	
Institution: (LIBR 1101 recommended)	2	
Option (Depended on Fall)		
Field of Study BIOL 1222 – Introd.to Research	2	
OR ST/FED: PEDS 2000 (grd req)		
Semester Total Hours	17	
YEAR 1 HOURS	31	
Milestones		
Meet Advisor Term (T) 1 and T2		
Complete Writing and Math required by end of T2		

YEAR 2		
Fall Term 1		
Course	Credits	✓
Field of Study: BIOL 2107K	4	
Major Course		
CHEM 3301 w/ lab	4	
Humanities: Literature course	3	
STEM: MATH 1120 OR 1401	3	
ST/FED: PEDS 1010 (grad. req.)	1	
Semester Total Hours	15	
Spring Term 2		
Field of Study: BIOL 2108K	4	
Major Option 1 (3 or 4 hrs)	3	
Major Option 2	3	
Citizenship: US History	3	
Social Sci: (Choose one)	3	
Semester Total Hours	16	
YEAR 2 HOURS	31	
Milestones		
Complete 10 hrs. community service		
Consider Internship for next yr.		

YEAR 3		
Fall Term 1		
Course	Credits	✓
Major Option 3	3	
Major Option 4	3	
STEM: Physic I* or Geology I	4	
Social Sci: (choose one)	3	
Humanities: - Appreciation course	3	
Semester Total Hours	16	
Spring Term 2		
Major Option 5	3	
Major Option 6	3	
STEM: Physic II* or Geology II	4	
Citizenship: Amer. Gov.	3	
Req-Major Course – BIOL 4010A - Research I	1	
Req -Major Course BIOL 4730 - Internship	1	
Semester Total Hours	15	
YEAR 3 HOURS	31	
Milestones		
Capstone Research Mentor Fall term		
Start Capstone Spring term		
Complete internship		
Create Resume		

YEAR 4		
Fall Term 1		
Course	Credits	✓
Major Option 7	3	
Major Option 8	3	
Major Option 9	3	
Req - Major Course BIOL 4010B - Research II	2	
Major Option X (if needed)	2	
FREE Elective	3	
ST/FED: PEDS Activity ((grd.req.)	1	
Semester Total Hours	17	
Spring Term 2		
Major Required 10 - Ecology	4	
Major Option 11	3	
Major Option 12	3	
Major Option 13	3	
FREE Elective	3	
Semester Total Hours	16	
YEAR 4 HOURS	33	
Milestones		
Complete ETS Major Field Exam (Grd. Req)		
Update Resume		
Complete First destination Survey		

*Required STEM option for Pre-professional pathways to maximize efficient use of credit hours.

** Introduction to Research (BIOL 1222) recommend for Fall -1st Year only for students with STEM AP Credits or strong lab background. Otherwise take Spring of Year 1.

See next table for options and recommendations based on Career Pathway.

Please note that these are suggested not require pathways. Course rotations may very change due to resource availability. Use the Curriculum Sheet and Degree Works to identify required courses. Make sure you speak to your advisor frequently to stay on your path to graduation.

Term	Major's	Pre-Professional	Cell/Micro Research	Organismal	Plant Science
Fall 1	ALL	CHEM 1211 w/1211L	CHEM 1211 w/1211L	CHEM 1211 w/1211L	CHEM 1211 w/1211L
	ALL	BIOL 1221 – 1 st Sem	BIOL 1221 – 1 st Sem	BIOL 1221 – 1 st Sem	BIOL 1221 – 1 st Sem
	ALL	BIOL 1222 – Research w STEM AP crd	BIOL 1222 – Research w STEM AP crd	BIOL 1222 – Research w STEM AP crd	BIOL 1222 – Research w STEM AP crd
Spring 1	ALL	CHEM 1212 w/1212L	CHEM 1212 w/1212L	CHEM 1212 w/1212L	CHEM 1212 w/1212L
	ALL	BIOL 1222 – Research	BIOL 1222 – Research	BIOL 1222 – Research	BIOL 1222 – Research
	ALL				
Fall 2	ALL	BIOL 2107K – Prin. Of Bio.	BIOL 2107K – Prin. Of Bio.	BIOL 2107K – Prin. Of Bio.	BIOL 2107K – Prin. Of Bio.
	ALL	CHEM 3301 w/3301L	CHEM 3301 w/3301L	CHEM 3301 w/3301L	CHEM 3301 w/3301L
Spring 2	ALL	BIOL 2108K – Prin. Of Bio.	BIOL 2108K – Prin. Of Bio.	BIOL 2108K – Prin. Of Bio.	BIOL 2108K – Prin. Of Bio.
	OPT 1	CHEM 3302 w/3302L	CHEM 3302 w/3302L	BIOL 2251K – Hum. A&P 1	CHEM 3302 w/3302L
	OPT 2	BIOL 2260K - Microbiology	BIOL 2260K - Microbiology	Field Course	BIOL 3710 Plants/ GA** OR BIOL 3000 Adv. Botany
Fall 3	OPT 3	CHEM 4410 - Biochemistry (w/L 4 hrs w/o lab 3)*	BIOL 3000+ elective Or Biochemistry	BIOL 3020 – Comparative Vertebrate Ant.**	CHEM 4410 - Biochemistry (w 4/wo lab 3)*
	² OPT 4	BIOL 4400 – Animal Physiology** BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology BIOL 3600 – Med/Vet Entomology	BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology	BIOL 4400 – Animal Physiology** BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology BIOL 3600 – Med/Vet Entomology	BIOL 4300 Plant Physiology** OR BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology
	STEM	PHYS 1111 (2211)	GEOL 1121 or PHYS 1111	GEOL 1121 or PHYS 1111	GEOL 1121 or PHYS 1111
Spring 3	OPT 5	BIOL 4460 Parasitology	Field Course	Field Course	BIOL 3710 Plants/ GA** OR BIOL 3000 Adv. Botany
	OPT 6	Field Course	BIOL 4460 – or BIOL 3000+	BIOL 3000+ elective	BIOL 3000+ elective
	REC	4010A- Capstone Research I	4010A Capstone Research I	4010A Capstone Research I	4010A Capstone Research I
	REC	BIOL 4730 Intern. – 1 crd min	BIOL 4730 Intern.–1 crd min	BIOL 4730 Intern. – 1 crd min	BIOL 4730 Intern. – 1 crd min
	STEM	PHYS 1112 (2212)	GEOL 1122 or PHYS 1112	GEOL 1122 or PHYS 1112	GEOL 1122 or PHYS 1112
Fall 4	² OPT 7	BIOL 4400 – Animal Physiology** BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology	BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology	BIOL 4400 – Animal Physiology** BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology	BIOL 4300 Plant Physiology** OR BIOL 3100 Cell & Molecular. Or BIOL 3400 Bacteriology
	OPT 8	BIOL 3020 – Comparative Vertebrate Ant.** BIOL 3600 – Med/Vet Entomology OR BIOL 2251K – Hum A&P I	BIOL 4300/4400 Physiology	BIOL 3600 – Med/Vet Entomology	BIOL 3300 – Use&Abuse of Plts.** OR BIOL 3600 – Med/Vet Entomology
	OPT 9	BIOL 4200 - Genetics	BIOL 3000+ elective	BIOL 3000+ elective	BIOL 3000+ elective
	REC	4010B – Capstone Research II	4010B – Capstone Research II	4010B – Capstone Research II	4010B – Capstone Research II
	OPT X ¹	BIOL 3000+ elective	BIOL 3000+ elective	BIOL 3000+ elective	BIOL 3000+ elective
Spring 4	REC 10	BIOL 4050 Ecology	BIOL 4050 Ecology	BIOL 4050 Ecology	BIOL4050 Ecology
	OPT 11	BIOL 3000+ elective	BIOL 4460 – Parasitology or 3000+	BIOL 3000+ elective	BIOL 3000+ elective
	OPT 12	BIOL 3000+ elective	BIOL 3000+ elective	BIOL 3000+ elective	BIOL 3000+ elective
	OPT13	BIOL 3000+ elective	BIOL 3000+ elective	BIOL 3000+ elective	BIOL 3000+ elective

** Recommended Course Option. ¹OPT X – Depending on the courses selected may have variable hours, student may need to take an additional course to make up any deficit due to course will less credit hours than expected. ²OPT 4 & 7 – Because classes are offer on rotation, will need to be take by some students in Fall 3 while other Fall 4 depending on how the rotation falls for them.

All tracks require: BIOL 4050, Chem 3301 w/L, 4010A/B, BIOD 4730, a cell course, a field course, a physiology course and a morphology course.