

Biology (B.S)

Degree Type

Bachelor's

Students in the B.S. in Biology program at Russell Sage College obtain competency in biology coursework, research, and an internship along with another field, which is referred to as a Companion Discipline (or track).

Students in the B.S. in Biology program must companion disciplines (or track): Clinical Laboratory Sciences (pre-professional), Cytotechnology (pre-professional), Forensic Biology, Illustration, Law & Society, Preparation for Medical Studies, Management, or Writing. [76-88 credits]

Core Requirements

Complete *all* of the following:

Item #	Title	Credits
BIO 101	General Biology I	4
BIO 101L	General Biology I - Lab	0
BIO 102	General Biology II	4
BIO 102L	General Biology II Lab	0
BIO 150	Writing in Biology	1
BIO 207	Fundamentals of Genetics	3
BIO 208	Microbiology	4
	BIO 312 or BIO 326 or BIO 336	3
BIO 359	Explorations in Research Methods	3
BIO 415	Cell and Molecular Biology	4
	BIO 401 or BIO 427	3
BIO 450	Seminar in Biology	3
	BIO Elective	3-4
	BIO Elective	3-4
CHM 111	General Chemistry I	4
CHM 112	General Chemistry II	4
CHM/PHY Course	CHM or PHY Elective Course	4
	Mathematics: MAT 112, 113, or 201	3
MAT 220	Applied Statistics	4

Companion Disciplines (Tracks)

- Students in the B.S. in Biology program must complete one of the following Companion Disciplines (21-29 credits):

Pre-professional Clinical Laboratory Sciences

Item #	Title	Credits
CHM 201	Organic Chemistry I	4
CHM 202	Organic Chemistry II	4
HSC 215	Health/Wellness Across Lifespan	3
PBH 201	Health and Society	3
PBH 305	Survey of Epidemiology	3
PHL 206	Ethics	3
PSY 101	Introduction to Psychology	3

Pre-professional Cytotechnology

Item #	Title	Credits
HSC 215	Health/Wellness Across Lifespan	3
	HSC Elective	
PBH 201	Health and Society	3
PBH 305	Survey of Epidemiology	3
PHL 206	Ethics	3
PSY 101	Introduction to Psychology	3
	PSY Lifespan Development (PSY 202 or PSY 208)	3-4

Forensic Biology

Item #	Title	Credits
BIO 209	Fundamentals of Forensics	3
CHM 201	Organic Chemistry I	4
CHM 202	Organic Chemistry II	4
CHM 303	Biochemistry II	3
PHY 102	General Physics II	3
PHY 102L	General Physics II Lab	1
	CRM or LAW Elective	3
	CRM or LAW Elective	3

Illustration

- Complete 7 courses from [AEM](#), [ARH](#), [GMD](#), or [ISD](#)

Law & Society

- Complete LAW 101 (3 credits) plus 6 additional courses from CRM, LAW, PSY, or SOC (18 credits)

Item #	Title	Credits
LAW 101	Introduction to Law	3
	CRM, LAW, PSY, or SOC elective	18

Management

- Complete BUS 205 (3 cr.) and 6 courses from ACC, BUS, or ECO (18 cr.)

Item #	Title	Credits
BUS 205	Principles of Management	3
	ACC, BUS, or ECO elective	18

Preparation for Medical Studies

- For students interested in pursuing dental, medical, physician assistant, and veterinary studies after their bachelor degree completion.

Item #	Title	Credits
BIO 201	Anatomy and Physiology I	4
BIO 202	Anatomy and Physiology II	4
PSY 101	Introduction to Psychology	3
	PHL Elective	3
	SOC course	3
	Medical Studies Courses (9-12 credits)	9-12

Science Writing

- Complete 7 courses from COM, ENG, HUM, or PHL

Degree Completion Notes

- Total credits required for a bachelor's degree (minimum): 120 credits
- Cumulative GPA required for graduation (minimum): 2.000
- Major GPA required for graduation (minimum): 2.200
- 1/2 of major requirements must be completed at Sage (minimum)
- Completion of all required **General Education** coursework

Suggested Course Plan

Preparation for Medical Studies - sample plan

Year 1 - Fall

BIO 101 General Biology I
BIO 101L General Biology I Lab
BIO 150 Writing in Biology
CHM 111/111L/111R General Chemistry I
RSC 101 Thriving at Sage
WRT 101 Writing in Community

Year 1 - Spring

BIO 102 General Biology II
BIO 102L General Biology II Lab
CHM 112/112L/112R General Chemistry II
PSY 101
WRT 201 Researching in Community

Year 2 - Fall

BIO 201/201L Anatomy and Physiology I
CHM 201/201L Organic Chemistry I
Statistics: MAT 220 or PSY 207
General Education Course (Wellness)
General Elective

Year 2 - Spring

BIO 202/202L Anatomy and Physiology II
BIO 207 Fundamentals of Genetics
CHM 202/202L Organic Chemistry II
RSC 201 Exp Intercultural Perspectives
General Education Course (Art)

Year 3 - Fall

BIO 208/208L Microbiology
Biology Elective course
RSC 301 Innovating to Impact
PHY 101/101L/101R General Physics I
PHL course

Year 3 - Spring

BIO 359 Research Methods
PHY 102/102L/102R General Physics II
SOC course
General Education Course (Hum)
General Elective

Year 4 - Fall

BIO 326 Principles of Ecology
BIO 401 Indep Project

BIO 427 Internship
BIO 450 Seminar
General Elective

Year 4 - Spring
BIO 401 Indep Project
BIO 415/415L Cell and Molecular Biology
General Education Course (Dist Elct)
General Elective
General Elective

Total Credits

57-59
