

Required courses⁰ for all Biology majors

Course	Name	Cr	Prerequisites ¹	Corequisites ²	Note	Fee	Terms Offered ³			
							Fa	Wi	Sp	Su
BIO 10100	Biological Foundations I	4	MATH 19000			\$30	A		A	A
BIO 10200	Biological Foundations II	4	BIO 10100			\$30	A		A	A
BIO 20600	Introduction to Genetics	4	BIO 10100 & BIO 10200				A		A	A
BIO 20700	Organismic Biology	4	BIO 10100 & BIO 10200	CHEM 10301 & MATH 19500 & ENGL 21003 ⁸		\$40	A		A	A
BIO 22800	Ecology & Evolution	4		BIO 20600 & (MATH 17300 or MATH 20900)	4	\$10	A		S	S
BIO 22900	Cell & Molecular Biology	4	BIO 20600			\$35	A		A	S
CHEM 10301	General Chemistry I	4	MATH 19500 with grade of C or higher			\$30	A		A	A
CHEM 10401	General Chemistry II	4	CHEM 10301 with grade of C or higher			\$30	A		A	A
CHEM 26100	Organic Chemistry I	3	CHEM 10401 with grade of C or higher				A		A	
PHYS 20300 ⁵	General Physics I	4	MATH 19500			\$10	A		A	A
PHYS 20400 ⁵	General Physics II	4	PHYS 20300			\$10	A		A	A
MATH 20500 ⁶	Elements of Calculus	4	Placement or MATH 19500 with grade of C or higher				A		A	A
MATH 20900 ⁶	Elements of Calc & Stats	4	Placement or MATH 20500 with grade of C or higher				A		A	A

⁰ Required BIO courses must be passed with grade of C or better. Other required courses must be passed with a D or better (but see footnote 1)

¹ BIO prerequisites must be passed with grade of C or better. Other prereqs for BIO courses must be passed with a D or better. Consult Chem/Math/Physics for minimum grades for prerequisites for their courses.

² May be taken at same time (if taken before, see footnote 1)

³ Fa = Fall, Wi = Winter, Sp = Spring, Su = Summer; A = Always, S = Sometimes

⁴ If MATH 20900 or 17300 not taken as a pre- or coreq, then MATH 21200⁷ can be taken as a prereq.

⁵ Acceptable PHYS sequences: (most common: 20300,20400) or (20700,20400) or (20700,20800)

⁶ Acceptable MATH sequences: (most common: 20500,20900) or (20100,20900) or (20100,21200⁸,21300⁸) or (20100,21200⁷,17300)

⁷ MATH 21200 was previously numbered MATH 20200. MATH 21300 was previously numbered MATH 20300.

⁸ If transferring from another college or major, an equivalent second English course can serve as the prerequisite

Honors & Independent Study courses (These courses count towards Bio Major elective credit and Biology residency requirements)

Course	Name	Cr	Prerequisites ¹	Corequisites ²	Note	Fee	Terms Offered ³			
							Fa	Wi	Sp	Su
BIO 30100	Honors I	3	BIO 10100, BIO 10200, & 20600	Two of these: BIO 20700, BIO 22800, BIO 22900	4,5		A		A	S
BIO 30200	Honors II	3	BIO 30100		4,5		A		A	S
BIO 30300	Honors III	3	BIO 30200	See note 6 below.	4,5,6		A		A	S
BIO 31000	Independent Study	1-3	BIO 20600	Two of these: BIO 20700, BIO 22800, BIO 22900	5,7		A		A	S

¹Must be passed with grade of C or better.

²Corequisite: May be taken at same time (if taken before, see footnote 1).

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⁴A minimum GPA of 3.5 in Biology Dept. courses and 3.0 overall is required for Honors.

⁵Admission to Honors or Independent Study is by application to the Honors and Independent Study faculty committee; applications are due 3 weeks before the start of each term.

⁶A maximum of 6 credits from Honors courses may count towards biology elective credits. BIO 30300 therefore does not fulfill Biology Major elective credit requirements, but it does count towards the total needed for graduation.

⁷A GPA of 3.0 in biology or better is required for Independent Study. BIO 31000 can be taken multiple times, but a maximum of 6 credits may count towards Biology Major elective credits. Credits above 6 still count towards the total needed for graduation.

Elective courses⁰ that count towards the Biology Major credit requirement and the Bio Major residency requirement

Terms Offered³

Course	Name	Cr	Prerequisites ¹	Corequisites ²	Note	Fee	Fa	Wi	Sp	Su
BIO 31007-31999	Selected Topics in Biology	3	Determined by instructor				S		S	
BIO 33000	Survey of the Vertebrates	3	BIO 10100				S		S	
BIO 34500	Botany	4	BIO 10200 & CHEM 10301				S		S	
BIO 35000	Advanced Microbiology	4	BIO 22900			\$25	S		S	
BIO 35100	Anthropological Genomics	3	BIO 22800 or ANTH 20300				S		S	
BIO 35200	Introduction to Immunology	3	BIO 22900				S		S	
BIO 35400	Introduction to Neurobiology	3	BIO 20700 or BIO 22900				S		S	
BIO 37500	Developmental Biology	3	BIO 22900				S	S	S	S
BIO 37800	Science of Sex and Gender	3	BIO 10100 & BIO 10200				S		S	
BIO 37900	Developmental Neurobiology	3	BIO 22900				S		S	
BIO 38000	Eukaryotic Genetics	4	BIO 22900					S		S
BIO 40100	Cardiovascular, Renal, & Respiratory Phys	4	BIO 20700				S		S	
BIO 41000	Cell Development & Cellular Senescence	3	BIO 22900				S		S	
BIO 41200-99	Seminars on Selected Topics in Biology	1-4	Determined by instructor				S		S	
BIO 41404	Brain Plasticity & Disease	3	BIO 20700				S		S	
BIO 42000	Virology	3	BIO 22900				S		S	
BIO 42500	Cancer Biology	3	BIO 22900				S		S	
BIO 43000	Genetics of Prokaryotes	3	BIO 22900				S		S	
BIO 43500	Origins of Molecular Biology	3	BIO 20600 & 22900				S		S	
BIO 44300	Insect Ecology	4	BIO 22800				S		S	
BIO 44900	Biology of Birds	4		BIO 20700 or 22800			S		S	
BIO 45000	Symbiosis	3		BIO 22900			S		S	
BIO 45100	Movement & Muscle	3	BIO 20700 or BIO 35400				S		S	S
BIO 45200	Neurogenetics & Behavior	3	BIO 22900				S		S	
BIO 45300	Conservation Biology	3	BIO 22800				S		S	
BIO 45400	Sensory Perception	3	BIO 20700 or BIO 22900				S	S	S	S
BIO 45500	Advanced Ecology	3	BIO 22800 & (MATH 20900 or 17300 or 21200 ⁵)				S		S	
BIO 45800	Biogeography	3	BIO 22800				S		S	
BIO 46000	Animal Behavior	3	BIO 10200				S	S	S	
BIO 46500	Ethnobotany	3	CHEM 10301 & 10401(MIN C)	BIO 22900			S		S	
BIO 46600	Plant Physiology	3	BIO 20700 or BIO 22900				S		S	
BIO 48000	Current Topics in Microbiology	3	BIO 22900				S		S	
BIO 48100	Introduction to Epigenetics	3	BIO 20600				S		A	
BIO 48300	Laboratory in Biotechnology	5	BIO 22900			\$55		S		
BIO 48500	Evolution	3	BIO 22800				S		S	
BIO 48800	Tropical Ecology & Conservation	4	BIO 10200		4	\$1550		S		S
BIO 49000	Molecular Systematics	3	BIO 22800				S		S	

⁰Elective courses must be passed with a grade of D or better

¹BIO prerequisites must be passed with grade of C or better. Other prerequisites for BIO courses and elective courses must be passed with D or better.

²Corequisites may be taken at same tie (if taken before, see footnote 1 above).

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⁴Study abroad course. Course fee includes most meals & all accommodation but not air travel. Fee subject to change.

⁵Math 21200 was previously numbered Math 20200.

Electives¹ that count towards Bio Major credit requirement but NOT towards the Bio residency requirement Terms Offered³

Course	Name	Cr	Prereqs ²	Note	Fee	Fa	Wi	Sp	Su
CHEM 32002 ⁴	Biochemistry I	3	(CHEM 26100 & CHEM 26300 with grade of C or better) or (CHEM 26100 with grade of C or better & Inst. Perm)			S		S	S
CHEM 44000	Journey to the Center of the Cell	3	CHEM 32002 or Instructor Permission			S		S	S
CHEM 44200	RNA Biochemistry	3	CHEM 32002 (min. grade: C)			S		S	S
PHIL 34905	Biomedical Ethics	3	One semester of philosophy or Instructor Permission			S		S	S
PHYS 42200 ⁵	Biophysics	3	1 yr. math & 1 yr. physics			S		S	S
PHYS 42300 ⁵	Biophysics in Applications	3	1 yr. math & 1 yr. physics			S		S	S
SCI 28000	Bioinformatics & Biomolecular Systems	3	1 yr. biology & 1 yr. chemistry			S		S	S

¹Elective courses must be passed with a grade of D or better.

²Consult Chem//Physics for minimum grades for prerequisites.

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⁴Also called CHEM 45902; cannot take one course if you have taken the other.

⁵Only one of Phys 42200 & Phys 42300 can be taken for Biology Major elective credit

Elective courses that DO NOT count towards the Bio Major credit requirement NOR the Bio residency requirement. Terms Offered²

Course	Name	Cr	Prereqs ¹	Note	Fee	Fa	Wi	Sp	Su
BIO 10004	Human Biology		Not for Biology Majors						
BIO 32100	Physiological Processes		For Engineering Majors Only						
BIO 24700	Anatomy & Physiology I	4	BIO 10100 or Departmental Permission		\$25	A		A	A
BIO 24800	Anatomy & Physiology II	4	BIO 24700		\$35	A		A	A
BIO 24900	Microbiology for Healthcare Professionals	4	BIO 10100 & CHEM 10301 or Departmental Permission		\$55	A		A	A

¹Prerequisite: Must have completed the course and passed with grade of C or better.

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