

Curriculum List (Undergraduate program)

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Mandatory Basic	BS120	21.120	General Biology	3:0:3	Spring, Fall	
Elective Basic	BS122	21.122	Diversity of Life	2:3:3	Fall	
Mandatory Major	BS200	21.200	Biochemistry Experiment	0:9:3(2)	Fall	
	BS202	21.202	Cell Biology	3:0:3(4)	Spring	
	BS205	21.205	Biochemistry	3:0:3(3)	Fall	
	BS209	21.209	Molecular Biology	3:0:3(4)	Spring	
	BS223	21.223	Introductory Biotechnology	3:0:3	Fall	
	BS319	21.319	Cell Biology Experiment	0:9:3	Spring	
Major Elective	BS208	21.208	Metabolism-inspired Drug Discovery	3:0:3(3)	Fall	
	BS232	21.232	Microbiology	3:0:3(1)	Fall	
	BS307	21.307	Physical Chemistry for Life Science	3:0:3	Spring	
	BS310	21.310	Genome Molecular Biology	3:0:3	Fall	
	BS311	21.311	Animal Diversity	3:0:3	Spring	
	BS312	21.312	Evolution	3:0:3	Fall	
	BS315	21.315	Genetics	3:0:3(3)	Spring	
	BS316	21.316	Introduction to Epigenetics	3:0:3	Spring, Fall	
	BS318	21.318	Developmental Biology	3:0:3	Fall	
	BS322	21.322	Cell and Biological Engineering	3:0:3(3)	Spring, Fall	
	BS326	21.326	Biotechnology Experiment	0:9:3(2)	Fall	
	BS342	21.342	Enzymology	3:0:3(1)	Fall	
	BS346	21.346	Animal Behavior	3:0:3	Fall	
	BS355	21.355	Pharmacology	3:0:3(1)	Spring	
	BS357	21.357	Introduction to Neuroscience I	3:0:3	Spring	
	BS358	21.358	Plant Biology	3:0:3	Fall	
	BS367	21.367	Biomolecular Chemistry	3:0:3	Spring	
	BS413	21.413	Experiments for Genetics and Developmental Biology	0:9:3	Spring	
	BS414	21.414	Ecology	3:0:3	Spring or Fall	◎
	BS415	21.415	Genomics	3:0:3	Spring, Fall	◎
	BS416	21.416	Molecular Genetic Techniques	3:0:3	Spring, Fall	◎
	BS417	21.417	Eco-Evo-Devo	3:0:3	Spring, Fall	◎
	BS431	21.431	Virology	3:0:3(3)	Spring	◎
	BS433	21.433	Molecular Biology of Gene Regulation	3:0:3(3)	Spring	◎
BS435	21.435	Bio-Imaging	3:0:3	Spring	◎	

◎: Course mutually recognized by undergraduate and graduate programs

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Major Elective	BS442	21.442	Stem Cell Biology	3:0:3	Fall	◎
	BS450	21.450	Neuroscience II	3:0:3	Fall	◎
	BS452	21.452	Immunology	3:0:3	Fall	◎
	BS453	21.453	Physiology	3:0:3	Spring	◎
	BS454	21.454	Introduction to Structural Biology	3:0:3(1)	Fall	◎
	BS456	21.456	Behavioral Physiology	2:3:3	Fall	◎
	BS458	21.458	Synthetic Biology	3:0:3	Fall	◎
	BS465	21.465	NanoBioTechnology	3:0:3	Spring	◎
	BS467	21.467	Biomaterials	3:0:3	Spring	◎
	BS469	21.469	Scientific communication	3:0:3	Spring	◎
	BS481	21.481	Topics in Life Science I	1:0:1		◎
	BS482	21.482	Topics in Life Science II	2:0:2		◎
	BS483	21.483	Topics in Life Science III	3:0:3		◎
	BS484	21.484	Topics in Life Science IV	3:0:3		◎
	BS485	21.485	Topics in Life Science V	3:0:3		◎
BS486	21.486	Topics in Life Science VI	3:0:3		◎	
Research	BS490	21.490	B.S. Thesis Research	0:6:3		Required
	BS495	21.495	Specified Research	0:6:1		Elective
	BS496	21.496	Seminar	1:0:1		Elective

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Curriculum List (Graduate program)

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Elective	BS501	21.501	Bioassay Standards	3:0:3	Fall	◎
	BS507	21.507	General Clinical Medicine	3:0:3	Fall	◎
	BS510	21.510	Neural control of Metabolism & Behavior	3:0:3	Spring, Fall	◎
	BS512	21.512	Biostatistics	3:0:3(4)	Fall	◎
	BS513	21.513	Synthetic Immunology	3:0:3	Spring, Fall	◎
	BS515	21.515	Behavioral Genetics	3:0:3	Spring	◎
	BS516	21.516	Advanced Genetics	3:0:3	Spring	◎
	BS517	21.517	Disorders in the Nervous System	3:0:3	Spring, Fall	◎
	BS521	21.521	Cancer Biology	3:0:3	Spring	◎
	BS525	21.525	Gene Expression	3:0:3(3)	Spring	◎
	BS528	21.528	Advanced Epigenetics	3:0:3	Spring, Fall	◎
	BS542	21.542	Immunotherapy	3:0:3	Fall	◎
	BS543	21.543	Advanced Neurobiology	3:0:3(1)	Fall	◎
	BS547	21.547	Neural Development	3:0:3	Spring	◎
	BS549	21.549	Biology of Metabolism	3:0:3	Spring	◎
	BS553	21.553	Omics Biology	3:0:3	Spring	◎
	BS554	21.554	Advanced Biological Engineering	3:0:3(3)	Fall	◎
	BS562	21.562	Protein Design	3:0:3	Fall	◎
	BS564	21.564	Bioanalytical Technology	3:0:3	Fall	◎
	BS566	21.566	Bioconjugate Chemistry	3:0:3	Fall	◎
	BS571	21.571	Advanced Animal Cell Engineering	3:0:3	Spring	◎
	BS584	21.584	Novel Drug Delivery Systems	3:0:3(3)	Fall	◎
	BS585	21.585	Advanced Developmental Biology	3:0:3(6)	Spring	◎
	BS586	21.586	Plant Developmental Biology	3:0:3	Fall	◎
	BS588	21.588	Cell Signaling	3:0:3(6)	Fall	◎
	BS589	21.589	Cancer Genetics	3:0:3	Spring, Fall	◎
	BS611	21.611	Advanced Molecular Cell Biology I	3:0:3(3)	Spring	
	BS612	21.612	Advanced Molecular Cell BiologyII	3:0:3(3)	Fall	
	BS613	21.613	Cellular and Molecular Immunology	3:0:3	Fall	
	BS614	21.614	Advanced Systems Neuroscience	3:0:3	Spring, Fall	
	BS632	21.632	Advanced cancer biology	3:0:3	Spring	
	BS711	21.711	Bioinformatics	3:0:3(3)	Fall	
	BS723	21.723	Cell Signaling Networks	3:0:3	Spring	
BS740	21.740	Selected Topics in Cell Biology	3:0:3	Spring, Fall		

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Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Elective	BS750	21.750	Selected Topics in Biotechnology	3:0:3	Spring. Fall	
	BS791	21.791	Scientific Writing in English	3:0:3(4)	Spring	
	BS803	21.803	Advanced Topics in Life Science III	3:0:3		
Research	BS960	21.960	M.S. Thesis Research			
	BS965	21.965	Independent Study in M.S.			
	BS966	21.966	M.S. Seminar	1:0:1		
	BS980	21.980	Ph.D. Thesis Research			
	BS986	21.986	Ph.D. Seminar	1:0:1		
	BS990	21.990	Graduate Student Seminar	1:0:1		

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Alternative Course List

Alternative courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no	Course title	Remark
Undergraduate	BS319	Cell Biology Experiment	BS319	Cell Biology and Genetics Experiment	course title changed
Undergraduate	BS120	General Biology	BS110	Basic Biology	abrogation course
Undergraduate	BS322	Cell and Biological Engineering	BS325	Microbial and Cell Biotechnology	abrogation course
Undergraduate	BS433	Molecular Biology of Gene Regulation	BS524	Advanced Molecular Biology	abrogation course
Undergraduate	BS431	Virology	BS526	Molecular Virology	abrogation course
Graduate	BS588	Cell Signaling	BS541	Advanced Cell Biology	abrogation course
Graduate	BS632	Advanced cancer biology	BS722	Biochemistry of Carcinogenesis	abrogation course

Alternative courses offered by other departments					
Category	Courses offered by the department		Courses offered by other departments		
	Course no.	Course no.	Course no.	Course no.	Remark
Undergraduate	BS202	Cell Biology	BiS202	Cell Biology	Bidirectional substitution
Undergraduate	BS208	BiochemistryII	BiS208	BiochemistryII	Bidirectional substitution